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DE VALERA, Ruadhrl and O NUALLAIN, Seán.  
*Survey of the megalithic tombs of  
Ireland. Vol. IV. Counties Cork,  
Kerry, Limerick, Tipperary. Dublin,  
Stationery Office, 1982. xx + 145 pp.,  
45 figs., 30 pls., 1 map. IR£35.00.*

simplicistic.

N. BRIDGES

This is the fourth volume in a series devoted to the survey of megalithic tombs in Ireland. As with previous volumes, and those to come, it omits one of the four classes of tombs, the passage tomb, which is to be dealt with in a final volume in this series. For whatever reason, it is a significant omission from the present published volumes. Passage tombs, especially those in the Boyne Valley, have always been set apart from other megalithic tomb types, partly due to their magnificence and their 'association' with those in Brittany. It is a pity that the authors did not see fit to include this class with the others as it perpetuates this unnecessary and unjustified division.

The actual format of this and the previous volumes is clear and well laid out. The three lists at the front of the book assist the reader at a glance to find descriptions, plans and photographs of the tombs of their interest. The basic documentation in this volume, as in the others, is of great and lasting value. Each tomb has a detailed description, plan drawn to scale, photograph and list of references. Such helpful additional information, which is often noticeable by its absence from other works, as Ordnance Survey map reference, Ordnance Datum level and grid reference are methodically included for all the tombs. Towards the back of the volume is a list of all the known wedge tombs in Ireland by County with grid references, a welcome if unexplained addition.

The volume must be a standard reference book, as with the others in the series, for anyone studying the megalithic tombs of Ireland. However, though one may have confidence in the factual documentation, perhaps Part II - Discussion should not be read with so much devotion. At present there is much work being done on tombs, their derivation, interpretation, dating, etc. The widely established theory of three major colonisations of tomb builders (court, passage and wedge tomb builders) with portal tombs being a native development, held by the authors of these volumes, is now being questioned as

CLARKE, D. V., COWIE, T. G. and FOXON, Andrew. *Symbols of Power at the Time of Stonehenge*. Published for the National Museum of Antiquities of Scotland by HMSO, 1985. 334 pp., 279 pls., mostly colour, 5 maps. £25.00.

In the last months of its separate existence the 200-year old National Museum of Antiquities of Scotland mounted a controversial exhibition for the Edinburgh Festival, for which occasion this book was published, in part as catalogue (essentially the last 88 pages), and in part as an independent publication which would outlive the transient exhibition of the same name. The exhibition aimed to show a non-archaeological public that the shadowy people of prehistoric times were 'no squat grunting savages', and that archaeologists can draw from the physical remains of the prehistoric past, from simple artefacts, a hypothetical reconstruction of the developmental processes at work in the evolving social systems of the later Neolithic and earlier Bronze Age periods. The book presents the scholarly apparatus of that argument, seeking to explain and document the transition from monument-building which emphasises the corporateness of the community to the emergence of the power of the individual whose rank and authority are expressed to all who see him in terms of artefacts, 'symbols of power'.

Before reading a word of the text one can appreciate that this is a book which is a delight to handle, a pleasure to browse in. For once the people responsible for that, the designer, and the three contributing photographers who supplied the sumptuous colour pictures, are given credit on the title page along with the authors. Although a number of the archaeological sites whose pictures punctuate the pages and the arte-



facts brought together to form the exhibition are very familiar, wherever possible Ian Lerner, Doreen Moyes and Mike Brooks have produced new colour images which are often so strikingly beautiful that the objects demand a fresh response. Sadly, in order to get all that text in, and the hundreds of illustrations, many of the pictures have had to be squeezed to an extent which does not do them full justice, as can be seen when one compares a full-page photograph (eg. the Blessington gold lunula from Co Wicklow on page 90) with a neighbouring small print of a similar object. Even so, never has the brilliant material of the period been shown in photographs to better advantage.

The approach taken in the text is what one might call 'soft' new archaeology. The authors say they wish simply 'to provide explanations which seem ... consistent with the archaeological evidence as it is presently known'. While the methodology may have none of the hard-edged vocabulary of hypothesis-testing or law-formulation, the theme is certainly born of the new archaeologists' insistence on the holistic nature of culture and the essential optimism that artefacts are made to carry latent messages of the deepest socio-cultural and ideological import, and that archaeologists can hope to read those messages.

Whereas Renfrew concentrated on the field monuments of Wessex in order to explore the changing political landscape of the Neolithic and Early Bronze Age, these authors, fittingly for museum-based archaeologists perhaps, are more concerned with portable objects which may act symbolically either to confer status through their acquisition or to provide concrete affirmation of power. After a general introduction to the subject the book sets out to consider the communality of the early Neolithic communities, with their monumental emphasis on the tombs of the ancestors, and the transition to another kind of corporate monumentality in the construction of the great henges, stone circles and alignments. The nub of the book is in the following chapter, entitled 'The Acknowledgement of Individual Power', which attempts to articulate the transformation in the archaeology (the advent of single burial, beakers and metallurgy in short) in terms of the emergence of a new elite consisting of individuals who wrested power from the traditional corporate elites, and who showed (or

gained) their authority from their ability to mobilise the new technology of metal-working and to control and patronise the new craftsmen. The last chapter is then concerned with these vitally important craftsmen, and here there are contributions from a number of other specialists, for example, on flint- and stone-working, gold and silver, jet and amber.

The analysis presented, as the authors are quick to point out, is strongly influenced by anthropological studies. It also fits very well in the recent tradition in British archaeology of socio-political interpretation of the Neolithic-Early Bronze Age transformation. Perhaps because they were too busy writing and organising the exhibition, there is little reference here to the closely parallel endeavours of Richard Bradley, whose own book, *The Social Foundations of Prehistoric Britain*, appeared only months before. Those wishing to find some new anthropological references to include in their own bibliographies and give the poor old !Kung and Hadza a rest are indeed recommended to this volume, which introduces a refreshingly new set of sources, which includes Cunningham's *Victorian and Edwardian Town Halls*, Gifford, McWilliam and Walker on Edinburgh buildings, and Vance Packard's *The Hidden Persuaders*.

David Clarke had already explored this line of explicit ethnocentric analogy a few years ago in his booklet to accompany the new exhibition of the Roman material in the National Museum of Antiquities of Scotland, but here it is taken much further. The general discussion at the beginning of the book of the use of artefacts as symbols, in particular as symbols of power, runs in parallel with a set of photographs illustrating contemporary symbols of authority easily recognised by us all, for example, the scarlet tabs of the General who is General Officer Commanding in Scotland (whose HQ is in the castle which overlooks all Edinburgh), the scarlet sash, pectoral cross and emphatic ring of the Cardinal Archbishop of St Andrews and Edinburgh, the scarlet and ermine and full grey wig of the Lord Justice General of Scotland. And the use of our own contemporary or recent cultural tradition for analogical support is maintained throughout by interjecting the occasional arresting photograph - the exaggerated mausolea of the Glasgow Necropolis in the chapter on the role of the ancestors in the consolidation and identi-



fication of the community of the living, or the Sèvres tea-cup and saucer in the section on craft ceramics with symbolic status overtones. Again it is fitting that these particular authors should give their work what some may say is a bias towards Scotland: others may feel that the viewpoint is more truly British than the more usual Wessex-centred treatment of British prehistory.

Having been in Edinburgh to hear reactions to the exhibition, I can say that it was much enjoyed by non-archaeologists, but many professional archaeologists were disturbed or even incensed that such a strong, single-minded line of interpretation should be offered. However, it is the book which will last, and in its brief conclusion the authors are at pains to repeat their own theoretical standpoint: 'all discussion of prehistoric material, where it goes beyond the mere descriptive, ventures into the unknown and the unverifiable ... the sole test of our conclusions ... must be their plausibility to the reader'.

TREVOR WATKINS

TAYLOR, J. J. *Bronze Age goldwork of the British Isles*. Cambridge, Cambridge University Press, 1980. 199 pp., illus. £45.00.

Professor Taylor has become a victim of time. The thesis which forms the basis of this book was submitted in 1970, and subsequent work extended some areas of the research to 1973. However, publication was delayed until 1980 and herein lies one of the main problems. The field of prehistory went through considerable change during the intervening ten years, and nowhere has this been more evident than in Bronze Age studies. The result is that much of the text is dated in its interpretation.

The book is divided into three roughly equal parts. The main text is followed by a corpus and then a section of maps, graphs and plates. After a short introduction the

reader is plunged into a lengthy section on the analysis of metalwork and its problems, a strange place to start. This turns out to be Taylor's justification for relying on the method of optical emission spectroscopy and upon the results of the work of Hartmann. She also goes to some length to explain why she rejects statistical methods for interpreting the results. Her reasons are not as valid now as they were when she wrote them. Sandwiched uncomfortably between these two topics is a case study of the Bracks Farm torc which deals primarily with manufacturing techniques.

The next five chapters deal with the development of goldworking from the early earrings and discs, which arrived 'with the first metal workers, the Beaker people', to the 'massive style' of the Later Bronze Age. Much of this, predictably, is concerned with lunulae and the division of the material into her now well known groups of 'classical', 'unaccomplished' and 'provincial' types. It is a pity that the list of lunulae does not reflect this grouping. One is left to work out which group a particular example falls into from fig. 37.

The Later Bronze Age goldwork is seen as being initiated by central European influence arriving via northern France. The ideas were absorbed and developed by British smiths who produced twisted ornaments, ribbon torcs and a variety of smaller, heavier items. The statement that 'ring-money' is only paralleled outside Britain in Egypt is untrue since examples exist in the Netherlands.

The technology of the goldwork is dealt with in each section, and also in the Bracks Farm case study. Taylor suggests some very interesting connections in this respect. A lunula from Kerivoa and another from Harlyn Bay are seen as being made by the same hand. In Wessex Taylor sees the gold from five graves as having been made by another single craftsman. These suggestions are worth following up and the work of Lowery, Savage and Wilkins has shown how tool marks can be identified.

The lasting value of this work lies in the corpus, and it is useful to have, at last, a list of British Bronze Age goldwork on which future research can be based. The list itself does contain some errors (eg. Sx 1-5 and Sx 35-39 are the same five bracelets from Beachy Head), but these are minor



when the problems involved in assembling and checking a corpus of this size are considered. It is a pity that all the material has not been illustrated. One of the assets of a good corpus is the collecting together of illustrations of the objects within a single work. This particular volume contains no drawings of the objects. How much of the corpus is covered by the plates is hard to determine as there is no cross-reference from corpus to plates. There is also no description of the objects within the corpus.

A similar problem of cross-reference occurs with Appendix 3. This consists of details of 183 analyses by Hartmann. These are arranged in an arbitrary order and consequently the list is not easy to use. To find if there is an analysis of the Yeovil torc, for example, one has to go through the list looking for So6. In fact the analysis is not included but surely it could have been, if only as a footnote to the discussion on p.61.

There are a number of minor errors in the book. For some reason the text figuring runs from 1-6 and 37-41, with 7-36, 42 and 43 at the end of the tables and maps near the back of the book. The reference to the plot showing the Heyope torcs (p.64, fig. 14a) is erroneous and should presumably read figs. 19 and 33. A misprint suggests that the Bog of Allen bulla is illustrated on Pl. 3b, whereas it is to be found on Pl. 36.

Whilst there are a number of good things in this volume, it is perhaps best summed up by the word disappointing. Possibly this is because much of Taylor's valuable work has been published elsewhere, and too much was expected after the lengthy delay.

BRIAN OLDHAM

O'CONNOR, B. *Cross-channel relations in the Later Bronze Age* (BAR Int. Ser. 91). 2 vols. Oxford, British Archaeological Reports, 1980. 858 pp., illus. £26.00.

MACREADY, S. and THOMPSON, F. H. eds.  
*Cross-channel trade between Gaul and Britain in the Pre-Roman Iron Age* (Occasional Paper [New Series] 4). London, Society of Antiquaries, 1984. 114 pp., 26 figs., 5 pls. £12.00.

At first sight it might appear that these two books would give the reader a picture of cross-channel relations from the later Bronze Age through to the commencement of the Roman period. In fact the only similarity between them is their titles. O'Connor's book is the publication of his university thesis, whilst the Iron Age volume contains papers given at a research seminar. They are as disparate in their content and treatment as they are in their production and price per page.

O'Connor's work is divided into two parts. The first part consists of 318 pages of text followed by an 111 page 'catalogue'. The second part is in a separate volume and includes figures, maps, a useful index and a valuable 65 page bibliography. After setting the scene with discussions of previous work and relative chronology, O'Connor moves into the main part of his thesis. The subtitle of the work explains what the reader is to expect - 'relations between Britain, North-Eastern France and the Low Countries during the Later Bronze Age and the Early Iron Age, with particular reference to the metalwork'.

The author found that he could divide the material into a number of chronological phases. He commences with the Middle Bronze Age and then has three stages of the Late Bronze Age (1, 2 and 3) followed by an unhappy amalgam which he calls 'Late Bronze Age 4 and Early Iron Age 1'. Within each phase he deals with the main metal types which are seen as being current during that phase. This is probably the most useful part of the whole work and is likely to be of lasting value. Each type is reviewed, discussed and examples listed and mapped. For ease of reference the types are grouped as tools, weapons, ornaments, vessels and horse-gear. The chapter on each phase ends with a summary of developments. The penultimate chapter attempts to explain what happened through the period covered by the thesis. Here O'Connor includes some of the non-metallic evidence as well as trying to produce an understanding of the organisation



and the deposition of metal-working. His conclusions follow on from this.

The sheer volume of material covered by this thesis is impressive and one is left in no doubt that O'Connor has a thorough knowledge of it. Perhaps the title is unfortunate because the 'relations' do seem to be lost under the sheer volume of metal considered. The approach is essentially typological and the problems of relating types to groups of people, and their inter-relationships, are too well known to require further comment.

It is easy to condemn a publication which was written as a thesis for not reading like a book. To criticise O'Connor's volume on that score would merely cast doubt upon the wisdom of the publishers, and surely it is better to have valuable contributions to archaeology in print rather than in university cupboards. There is too much of value in this book to relegate it there, even if there are other views on the interpretation of the evidence. It is a useful work of reference from which further study may proceed.

In his introduction to the collection of papers edited by Macready and Thompson, Giot warns of the difficulties of identifying trade and detecting on what scale it was conducted. Some of the contributors walk where angels fear to tread!

Duval ignores trade and concentrates instead on clearing the ground on the French side of the Channel by establishing what exists as a basis for comparison with the British material. He examines the 'archaeological geography' of France from the 5th century BC to the Roman conquest and concludes that the divisions of Gaul at that time 'only imperfectly reflect the cultural realities of independent Gaul'. The 'Marnian' is seen as a dynamic concept. The ultimate decline of the Marnian is accompanied by 'Celticization'. In Picardy Duval sees this process producing changes in the funerary rite in which he can identify the first evidence of the Belgae. This leads him to suggest that cross-channel similarities may have been socio-economic before they were cultural or ethnic. Duval is openly critical of accepting the ancient authors.

Seminars are intended to generate dis-

cussion and Cunliffe's paper certainly does that. He looks at the changing face of cross-channel trade from the second century BC to the Claudian Conquest and sees a gradual shift eastward in the links. This is closely related to the changing power of Rome. The first change sees a shift from an Atlantic trade route to an Hengistbury-Alet/Naqueville line, which Cunliffe relates to the formation of the province of Transalpine. A further shift east occurred during Caesar's conquest of Gaul with the Channel becoming more important. When this was completed the axis of trade was from northern France to south-east England and was essentially oriented towards Rome. Perhaps the most intriguing suggestion Cunliffe makes is in his 'even more tentative' postscript. Could we not have got it all wrong and could not the Belgae have come across the Channel to southern Hampshire, he asks. If we can't get rid of the Belgae, and we don't follow Duval, at least we can move them!

Predictably amphorae play a major part in any consideration of cross-channel trade in the later Iron Age. Galliou decides that the only things which change in the wine trade are the bottles and the routes. Basically he agrees with Cunliffe that changes relate to the power of Rome. The fact that there is a mutually exclusive distribution of Pascual 1 and Italian Dressel 2-4 amphorae in England, whereas the two are often found together in France, gives cause for concern. If we are to believe the suggested trade routes this should not be so. Peacock does not address himself to this problem in his brief reassessment of British amphorae. He is concerned only with the problems of Dressel 1 types and the appearance of new types. The Conquest, to him, had no effect upon the cargoes carried. Peacock obviously had not heard Giot's warning and perhaps would not care for his postscript either - 'perhaps undue emphasis has been placed on amphorae because of their better survival value'.

The remaining three papers are very different. Langouet presents the data from Alet and puts them into the context of cross-channel trade and the role of the Coriosolites. Stead attempts finally to lay low the idea that anything fine or unusual cannot have been made this side of the Channel. He finds plenty of evidence that ideas crossed the Channel, but little to suggest that metalwork did. However, he



alone heeds the warning of Giot and states clearly that so much has disappeared that we have but a small and probably unrepresentative sample on which to base our speculation. Nash looks at the 'basis of contact' across the Channel and uses the ancient authors, less critically than Duval, and coins to postulate that there were two types of society in Britain and Gaul in the first century BC; the 'purely agrarian' and the 'warrior agrarian'. The former are seen as existing in south-west Britain and Armorica, whilst the latter are exemplified in south-east Britain and Belgic Gaul. Put in its simplest form Nash suggests that the south-west was a peaceful place where production, trade and settled life abounded, whereas the south-east was the battlefield of unsettled pastoralists! The existing settlement and environmental evidence in south-east Britain does not support this hypothesis. Coins, like the ancient authors, need to be 'treated with critical caution'.

Together this set of papers is interesting rather than informative, but then the main purpose of seminal papers is to generate thought rather than to set forth a mass of data. A number of suggestions are capable of being tested and it is to be hoped that they will be.

BRIAN OLDHAM

FAIRHURST, Horace. *Excavations at Crosskirk Broch, Caithness* (Society of Antiquaries of Scotland Monograph Series 3). Edinburgh, Society of Antiquaries of Scotland, 1984. 186 pp., 107 illus., 24 tables. £17.00.

Dr Fairhurst reports on his excavation of the broch at Crosskirk, dug in five University vacations between 1966 and 1972. The format of the Monograph series is attractive; the photographs are excellent and the plans clear and comprehensive, but the sections sadly inadequate. Since the broch was to be (and has been) demolished, full architectural drawings might have been

prepared; presumably the DoE could not afford this.

The dig was a rescue measure since the broch was falling into the sea. Total excavation was envisaged, and more or less achieved for the broch, but only a small area of the external settlement was investigated with the time and money available. This is the first published modern excavation of a broch in the area where they are most numerous, Caithness, Sutherland and Orkney. The description of the structures, the plans of the arrangements of the broch interior, and the recovery of the first set of stratified finds from a broch in this area are invaluable.

The broch was set on a headland defended by a massive wall and ditch with a narrow entrance. Between the wall and the broch was a settlement of domestic structures closely packed and often rebuilt. Fairhurst has made a valiant attempt to disentangle the resulting sequence and to link it to an equally complex sequence of reconstruction of the broch. The evidence is presented carefully, but not all his conclusions can be readily accepted. It is hard to believe that the massive wall and ditch defended the entrance only and petered out on each flank; surely there was a continuous defensive barrier here? A chronological sequence was painstakingly worked out from what few clues the dig provided. The suggested sequence starts with the outer rampart, well back in the 1st millennium BC, followed by the broch in the 3rd or 2nd century BC, to which the settlement was soon added. It can be argued that outer rampart, broch and settlement make better sense if regarded as contemporary in origin.

The radiocarbon dates for the site, if used over their whole calibrated range at 95% confidence level, do not date the second occupation phase in the broch (Period III) to the second century BC as Fairhurst believes. One date thought to be of this period comes from a rib-bone in Grave III, manifestly cut down from above at a later period, while other dates are from scraps of charcoal that may be residual. The best evidence for dating the broch sequence comes from Samian sherds and Roman glass in a context within the broch of either Period III or Period IV (but found before these particular levels had been distinguished). This means that Period IV at least (the latest occupation in the broch) and possibly



Period III cannot be earlier than the 2nd or 3rd century AD and could be later. Working backwards from this there is no evidence for a long drawn out occupation, and the original construction of the broch, rampart and settlement in the 1st century AD or at earliest the 1st century BC might seem more likely.

The report concludes with a sensible discussion of the present (1979) state of broch studies, particularly in relation to Caithness and Orkney. Even if the 3rd or 2nd century BC date suggested for the construction of the broch is too early, Fairhurst's conclusions on the importance of the Caithness and Orkney areas for broch origins may still be right. The Crosskirk report is an important contribution to broch studies.

J. CLOSE-BROOKS

HOLDER, P. A. *The Roman army in Britain*. London, Batsford, 1982. 173 pp., 31 pls., 10 maps and plans. £9.95.

Learned authority in Roman military matters has already expressed a cordial if qualified welcome to Dr Holder's book (see Brian Dobson in *Britannia* xiv [1983], 362-4). Since the seven chapters which form the main text are confined to barely one hundred pages (including also the ten maps and plans) it is only to be expected that there has been comment on the means judged necessary to achieve such compression. Thus one finds rather arbitrary and seemingly unsupported assertions in the text matched by a haphazard citation of the original evidence and a meagre guide to modern scholarship. For all that it is a praiseworthy attempt to fill a gap in the literature on Roman Britain. The text is clear and straightforward and there is no needless parade of the erudition which the author undoubtedly commands. Some may find difficulty with the use of modern terms in the general area of 'promotion', 'selection' and 'career prospects' in that they are anachronisms from the modern corporate structure too often imported into Roman

army discussions. Many will find the appendix containing a catalogue of units attested for service in Britain a useful and up-to-date ready reference. Nonetheless there might have been a warning that readers who would seek more detail on the movements and identities of auxiliary units are likely soon to be confronted with a bewildering maze of uncertainty and unfounded conjecture.

Those who use the book from the standpoint of Roman Britain may be disappointed to discover that the author has adhered strictly to his proclaimed purpose of bringing together the evidence for the units, officers and men of the Roman armed forces in Britain. As a result we hear much about recruitment, pay, promotion, unit strength and organisation, but little of what the army did and how its function would seem to have changed during the four centuries of Roman Britain. Most of the chapters are so much occupied with analysis of organisation that there is no space for brief comment on the changes in social status and relations with the provincial population which can be perceived even in such a province as Britain. It is disappointing to see that a chapter on the army in the fourth century plunges straightway into matters of strength and organisation, without a general paragraph that seeks to tell the reader how the army as a whole had changed from what it had been in the early principate. Even within the two centuries of the principate, are there not unreasonable grounds for questioning whether the army of the later second century still retained the strength and efficiency it had undoubtedly possessed at the time of the invasion? Hadrian had once concentrated a large army in Britain evidently to bring about a rational and stable limit to the Roman province. It so happens that after his reign Roman army units ceased to be moved in their entirety from one end of the empire to the other. Mobile detachments (vexillations) were sent for the duration of an emergency with, it seems, the expectation of returning 'home'. Is it perhaps not possible that during the second half of the second century much military manpower was siphoned off from the province in this fashion? That is the implication of a recent note on the Newcastle dedication by vexillations of the three British legions late under Antoninus Pius (RIB 1322; see *Zeitschrift für Papyrologie und Epigraphik* 59 [1985], 291-6, arguing that the troops are going to, and not coming from, the two

German provinces). If that was not the case we are left with what was ostensibly a hugely disproportionate army in Britain (compared with Africa where one legion and a large force of auxilia sufficed for the entire Mahgreb) quietly drawing its pay and polishing its parade helmets while the rest of the empire reeled from the impact of plague and a German invasion of Italy. It is not unfair to suggest that much of Holder's book has the air of a regimental history where no hint of anything out of order can be allowed. Thus nothing on the extraordinary episode under Commodus in which 1500 spearmen (evidently *contarii*) were chosen by their officers in Britain to march to Rome and complain about the plots of the praetorian prefect Perennis (Cassius Dio 72, 9, 2-4; Anthony Birley, *Septimius Severus* [1971], p.122 f., is sceptical and suggests that the troops who met Commodus were already on detachment for continental duty).

Holder's book is welcome but there is more that could, and indeed should, be provided for the general reader on this important aspect of Roman Britain. Finally a note of protest: many of the plates are of poor quality. Why is it that reputable academic publishers in this country appear so often content to be fobbed off with such a poor quality of illustration?

J. J. WILKES

DAVEY, Norman and LING, Roger. *Wall-painting in Roman Britain* (Britannia Monograph Series 3). London, Society for the Promotion of Roman Studies, 1982. 231 pp., 60 figs., 124 pls., 1 col.fiche. fl1.50.

A whole new dimension for Romano-British archaeology is opened up by this important pioneering volume. As Professor S. S. Frere, the series editor, points out in his Preface, the 'systematic recovery of fallen painted wall-plaster from the ruins of Romano-British buildings began only after the Second World

War'. The Lullingstone Villa finds first indicated the possibilities. Subsequently, with the great quantities discovered at Verulamium from 1955 onwards, came the involvement of Dr Norman Davey of the Government Building Research Station at Watford, whose combination of archaeological and technical expertise and whose lifelong devotion to the laborious task of preservation and re-assembly has totally transformed this area of study and helped to put it on a sound footing for the future. His results so far, the re-assembly of some 80 panels of painted panels of wall- and ceiling-plaster from 53 sites, are presented here. Dr Davey himself deals with ancient techniques and modern methods of preservation, while the equally valuable commentary on art-historical aspects and the broader Roman context has been provided by Dr Roger Ling of the University of Manchester. In the full Introduction various aspects of the material are discussed. Inevitably, with so much painted plaster appearing, most of which is as yet unpublished or even unstudied, a selection has had to be made; but it includes all significant finds. Problems of dating are discussed, including how close Britain kept to metropolitan fashions. Tentative general observations on styles and patterns follow: technically good work is normally first or second century, while coarser and white-ground examples belong to the third and fourth. The limited range of figure-subjects and motifs shows a strong emphasis on Roman culture and pursuits, and includes important, if fragmentary, mythological compositions. Next the distribution of finds, mostly from the prosperous lowlands and from civilian buildings, and the organisation of work are discussed. Early work would have been done by immigrants, but soon local schools seem to have been set up, and every major town would have had at least one *atelier*; there are even signs of regional schools. Detailed discussion follows of ancient techniques of plasterers and painters, and of modern methods of recovery and restoration. The Catalogue comes next, with the 53 sites conveniently arranged alphabetically and accompanied by black and white photographs and drawings; there are colour photographs of 15 important items, and 60 more in colour on a microfiche (unfortunately not referred to in the text, but listed on p.231). Appendix I adds 12 more items known from old records. Appendix II lists pigment identifications, a most valuable addition.

The authors have successfully tackled a task of enormous difficulty, and opened up a new area of Romano-British studies; they have transformed our view of interior decoration in the province, and thrown fresh light on the links between Britain and the rest of the Empire.

MALCOLM A. R. COLLEDGE

HENIG, M. *Religion in Roman Britain*.  
London, Batsford, 1984. 263 pp.,  
109 illus. £25.00.

This survey of religion will be welcomed by all students of Roman Britain. The subject matter is not so comprehensive as would appear by the title because the emphasis lies on Roman religion. The book starts with the obligatory survey of Celtic religion, and a later chapter considers the Eastern religions, placing Christianity firmly amongst these. Both these areas are put more off-stage than is customary and although other volumes have dealt in detail with them Dr Ross's book was published almost twenty years ago so that there is room for further discussion. Nevertheless, there is ample compensation in the meticulous compilation of the archaeological evidence and in consideration of the texts relating to religion and worship both in, and as it could have been applied to, Britain. A framework is provided by a chapter on the Roman gods set within the context of the religious calendar and festivals. Britain as a province of the Empire would have been expected to conform in such matters as law but in the case of religious belief there was a great deal of tolerance and perhaps the performance of ritual in the Roman manner meant very little to members of the army or the civil service. Consideration is given to the Roman state and religious practice, and to the social function of religion. One very interesting chapter deals with religion and superstition in daily life; another considers the Otherworld and the burial practices which prepared the dead for entry into that world.

Discussion centres more on the social and political aspects rather than the historical ones and the last chapter deals with Pagan and Christian in late antiquity. There is a very good bibliography and over 100 photographs. Many of these depict well-known objects or sites and it seems a pity that the opportunity was not taken to present less familiar ones. The only other quibble is with the price. This book will be useful and informative both to the general reader and the student; unfortunately the price will deter them from purchasing their own copy and so far the book has appeared only in hardback.

JOAN P. ALCOCK

SWAN, Vivien G. *The pottery kilns of Roman Britain* (Royal Commission on Historical Monuments Supplementary Series 5).  
London, HMSO, 1984. x + 179 pp., 23  
figs., 46 pls., 18 maps, 1 microfiche.  
£13.50.

This long-awaited work, a decade in preparation, supplants Corder's (1957) paper as the fundamental text for the student of Romano-British pottery kilns. The author starts by discussing factors influencing the siting of kilns and hence the distribution of kiln sites. She proceeds to distil evidence relating to the construction and operation of kilns, including kiln furniture and tools associated with pottery production. A synthetic history of kiln development is followed by detailed examination of regional types and those of the major industries. As well as outlining the history of kiln studies, the author concludes with her view of the future requirements in ceramic research. Well illustrated throughout, there are excellent line drawings, maps and perspective reconstructions to supplement the plates.

A major part of the work has been devoted to compiling an exhaustive 527 page gazetteer of c.1383 known or suspected kilns. Correct up to 1982, there is an



obvious case for its periodic updating. The author has visited many of the sites listed as well as interviewing local excavators and farmers to supplement often meagre published information. The gazetteer is indexed by county and parish but is relegated to fiche by economic necessity. This will be regretted by local archaeologists who have limited access to fiche readers, but the reviewer understands that a printout of the whole fiche is available through David Brown.

The only criticism of the work is that it errs on the optimistic side when considering kilns of dubious validity or uncertain location. The author has, probably wisely, decided to include all such sites that have not been positively discredited. Produced at a reasonable price, this book is already proving popular. It is clear that it will remain the standard work on the subject for many years to come.

JASON MONAGHAN

FRERE, Sheppard. *Verulamium excavations*. Vol. II (Reports of the Research Committee of the Society of Antiquaries of London 41). London, Thames and Hudson, 1983. xiv + 346 pp., 156 figs., 47 pls. £30.00.

This is the second part of the report on excavations between 1955 and 1961 directed by Sheppard Frere for the Society of Antiquaries at the site of the Roman town of Verulamium, on open ground alongside the river Ver at St Albans, Herts. Covered here is the whole campaign except for the block of buildings in Insula XIV and its fundamental pottery sequence that were covered in Vol. I; the non-samian pottery is published here, but not the specialist reports on samian, coins, wall-plaster, etc.; these are included in Vol. III. The text was completed in November 1978: a piece of information which is useful to the reader, and ought to be standard practice.

These excavations were conducted over

20 years ago, and the age of the techniques used is evident (most notably in the fact that all the recording was in feet and inches: metric equivalents are added in the text). The three volumes of Frere's excavations comprise a well-organised whole because their purpose was clearly envisaged with the emphasis on dating, using the coarse pottery as well as other products, to provide as far as possible an accurately dated stratified sequence of deposits for the whole Roman period. The excavation techniques may now be old-fashioned, but the results have purposely been subject to long and deep consideration. Frere's introduction neatly summarises his standpoint: 'the deductions made in the Wheelers' report were utilized by R. G. Collingwood as a framework for the history of urban civilization in Roman Britain..... Yet the results were based on a sample which was small..... and their interpretations suffered from *celeritas Wheeleriana*; the chronology adopted was based very largely on the samian finds and coins, which could be easily and quickly assessed, and very little on the coarse pottery which would have involved time-consuming basic research'. One of Frere's main aims has been to rectify this. The chapter on the coarse pottery is well integrated with the text describing the details of each group's context and the full dating evidence for each area appears in summary lists in each section, taken Insula by Insula, and preceded by chapters on 'the Belgic mint', the defences (a major revision of Wheeler's conclusions), the forum, and the northern monumental arch. The coarse pottery is confined to those groups which come from well-dated stratified contexts. It is published in groups; the numbering follows on from that in Vol. I (and Vol. III winds up with any 'significant residue' and a useful list of revised dates for types of pottery covering the whole three-volume sequence). The value of the coarse pottery sequence suffers from one serious detraction: for a great deal of it there is no indication of temper in the fabric descriptions. Thus the survival of grog-tempering in later 1st century AD deposits, for instance, is hard to assess: the occasional use of the tag Belgic (*sic*) does not cover all those examples illustrated that may, from their form, be grog-tempered, but are only described as of 'granular dark grey-brown ware' or the like.

ISOBEL THOMPSON

PITTS, Lynn F. and ST. JOSEPH, J. K.

*Inchtuthil, the Roman legionary fortress* (Britannia Monograph Series 6). London, Society for the Promotion of Roman Studies, 1985. 344 pp., 102 figs., 47 pls., 24 tables. £19.00.

This attractive volume constitutes the long awaited report of 14 seasons of excavation undertaken between 1952 and 1965 by Sir Ian Richmond and Dr (now Professor) J. K. St. Joseph at the Flavian legionary fortress of Inchtuthil in Perthshire. Sir Ian died suddenly within a few days of the end of the 1965 season. The moving spirit behind the project to bring to a wider public the results of the excavations was Professor Sheppard Frere whose perseverance deserves our warmest praise. The present work grew out of a doctoral thesis prepared under his supervision at Oxford in 1978-82 by Lynn Pitts, based on Richmond's site-drawings and photographs held at the Ashmolean Library, Oxford, and at Cambridge. Almost no written records survive. The thesis has been revised, and is now supplemented by some expertly written chapters by Professor St. Joseph setting the fortress in its geographical and strategic setting; specialist reports catalogue the coins, ironwork, glassware and pottery. There are numerous photographs, line drawings and tables. The groundplan of the fortress is familiar to every student of Roman archaeology. Here the reader will find full discussion of the defences and the various timber-framed buildings of the interior, with useful comparisons with other legionary fortresses in Britain and beyond. There is also full description of the diverse structures found outside the fortress: the 'redoubt', the temporary officers' compound (which the authors suggest might have served as short-term accommodation for the legate), the adjacent temporary camps (Professor Frere offers a speculative assessment of the numbers of soldiers housed there), the 'western vallum' and other Roman installations in the neighbourhood, including the Cleaven Dyke, which the authors adjudge not to be of Roman date. The report by Professor W. H. Manning on ironwork deals mainly with the immense dump of nails found in a pit below the workshop floor; contrary to received opinion, 'a large proportion' of the nails had been used - pulled out of timbers and planking at the demolition of the fortress - rather than unused stock.

Much of the coarse pottery and mortaria was locally produced.

The authors hold to the view that construction was begun under Agricola himself around AD 83, and that the site was abandoned unfinished in AD 86/87. Others have supposed that construction did not begin until about 85. It is unfortunate that little is apparently known about the find-spots of the few coins found during the dig, five of which are datable to AD 85/86. Though the volume exhibits a few minor blemishes and inconsistencies, it will deservedly find a place on the bookshelves of all genuine students of Roman Britain.

LAWRENCE KEEPIE

WELCH, Martin G. *Early Anglo-Saxon Sussex* (BAR Brit. Ser. 112). Oxford, British Archaeological Reports, 1983. 2 vols. xii + 654 pp., illus. £27.00.

In this large comprehensive tome Martin Welch gives a rather materialistic, artefact orientated, but extremely detailed catalogue of Early Anglo-Saxon Sussex. Volume I provides the text whilst the second volume contains both an excellent gazetteer of sites with references broken down into primary and secondary sources, and the artefact illustrations.

The subject is one which has rarely been tackled before and Dr Welch sets the scene well with the Introduction, Sussex Landscape, and Prehistoric and Roman Sussex. The rest of the text is very comparative and detailed; perhaps more suited to a PhD text for which it was written, rather than the general volume here. However, the discussion of Brooches, Pins, Weapons and Cremation vessels is highly explicit and meticulously researched. The synthesis and conclusions are written in the same mould, being highly comparative and artefact specific. This research has allowed Dr Welch to isolate regional constraints within the Early Anglo-Saxon entity in Sussex.

The second volume which provides a detailed catalogue of Early Anglo-Saxon sites in Sussex up to 1982 is a superb reference for any student of Saxon Sussex. The artefact drawings, however, vary greatly in style and some are perhaps not all they could be.

The two volumes provide in depth information collated in a single tome about Early Anglo-Saxon artefacts but give little idea of more humanistic or socio-cultural affinities and it is a pity that the synthesis and discussion did not tackle these aspects. However, having said that, these volumes will be the basic reference work for many years to come and are a 'bible' to any student of Early Anglo-Saxons, not only of the county of Sussex.

M. J. ALLEN

WITNEY, K. P. *The Kingdom of Kent*.  
Chichester, Phillimore, 1982. 292 pp.,  
8 pls., 4 col. pls., 4 maps. £12.00.

This book deals in detail with the history of Kent from the Saxon invasions till its absorption into Wessex. This brings to mind the saying 'It is not that were well done but that it were done at all' for this is the so-called Dark Ages though there does seem something of a fashion for histories of the various kingdoms of this period and in many ways Kent is better provided with sources than most.

Nevertheless the sources are scanty and it is therefore imperative to use all the various kinds of evidence available and this the author has done but it has to be said that he is more at home with the documentary material than the archaeological and although he uses the archaeological material he does not discuss it critically in the way he does the documents. This is perhaps only to be expected and it is laudable that he does not neglect this sort of evidence.

Being so short of information much

interpretation is needed, even at times speculation, and inevitably different readers will disagree with different points but on the whole most people will find the generality acceptable.

Because of the scarcity of contemporary sources the author is forced to use later sources and extrapolate them backwards. Extrapolation is always a dangerous procedure though obviously essential in such circumstances but I do feel that he does not pay enough attention to recent work which has claimed that the picture of England that we have in Domesday Book is largely of comparatively recent origin and does not go back to the Saxon invasions as was once thought (and as the author still thinks). I am not saying that he is wrong (though personally I think that the Norman Conquest was a much bigger upheaval than it is now given credit for) but that he does not address the problems.

The standard of editing is reasonably good; there is a scatter of spelling errors, the odd malapropism (pattern for paten) and twice, at least, the footnotes do not synchronize.

This book should appeal to those interested in the development of the Saxon kingdoms and also those interested in the history of South East England, especially, of course, Kent. Any Kentish nationalists will find a kindred spirit in the author.

G. J. DAWSON

GELLING, Margaret. *Place-names in the landscape*. London, Dent, 1984. xi + 326 pp., 8 maps. £15.00.

For anyone seeking to reconstruct the landscape in Anglo-Saxon England, the place-names provide a wealth of evidence. In this book, Dr Margaret Gelling lists all the place-name elements which describe the local topography. From these we can tell whether a settlement was located on a hill or in a



valley, by a river or lake, beside a road, in woodland or open farmland, etc., without even referring to the map. She groups the name elements into seven sections, beginning with rivers, springs, pools and lakes; next marsh, moor and flood plain; then river-crossings and landing-places, roads and tracks; valleys and remote places; hills, slopes and ridges; trees, forests, woods and clearings; and finally ploughland and pasture. An index at the end lists alphabetically every name element and also every place-name cited, together with an interpretation of the place-name's meaning, eg. oak wood for Acol in Kent. All references to counties are related to the pre-1974 boundaries. Gelling offers us new interpretations for some place-name elements, the result of careful consideration of each relevant example with its location on Ordnance Survey one-inch maps. For example, *anstiga* or *ansty* usually translated as a 'single-file path', a term for a narrow footpath up a steep hill, has been redesignated here as 'a short stretch of road used by at least four roads which converge on it at either end' (pp.63-64). Place-name experts will doubtless disagree with some of her interpretations, but historical geographers and archaeologists will be grateful to the author for making this information so accessible.

MARTIN WELCH

based on the place where buildings are and the rest on the type of building.

Each chapter, except the first, comprises three elements: the text which is a brief, often very brief, description of each building mentioned; a series of photographs of nearly all the buildings mentioned in the text with captions repeating much of the same information; and lastly a list of the same buildings (in some cases, such as Parish Churches, with others not otherwise mentioned) with indications of access.

It would have been better to have integrated the list with the text and greater coordination between the text and illustrations would also have been desirable (the text makes no reference to the illustrations at all). The photographs also leave a lot to be desired, many being too distant or too indistinct to show the features mentioned (the method of reproduction does not help).

Generally it is difficult to see what market this book is catering for. It is certainly not a book one would want to read yet the amount of information about any particular building hardly makes it much use as a reference book. There are a fair number of errors too, the map of monastic houses being the worst with no Carthusian symbol appearing (the only one actually shown masquerades as a Cistercian house and most of the Friaries are also missing).

G. J. DAWSON

RYDER, Peter F. *Medieval buildings of Yorkshire*. Ashbourne, Moorland Publishing Co., 1982. 159 pp., illus. £8.95.

This book is a guide to the medieval buildings of Yorkshire not a study of them. It is largely arranged by type of building (so that, for example, there are chapters on Great Churches, castles, etc.) though the first chapter deals with York separately. This illustrates the great problem with this book; it does not really know what need it is meeting. Though it might seem sensible to have a special chapter on York since York is so special, it means that one chapter is

CUNLIFFE, Barry and MUNBY, Julian. *Excavations at Portchester Castle*. Vol. IV. *Medieval, the inner bailey* (Reports of the Research Committee of the Society of Antiquaries of London 43). London, Society of Antiquaries of London, distributed by Thames and Hudson, 1985. xvi + 316 pp., 107 figs., 49 pls. £39.00.

This handsome publication, issued in a presentation box and accompanied by a cased

set of loose plans and sections, is a Research Report of which the Society of Antiquaries can feel proud. It is the fourth volume of Professor Barry Cunliffe's excavations at Portchester and it fully maintains the standard of archaeological reporting of its precursors. However, the work under review is no mere excavation report but one of the most remarkable cooperative ventures I have ever read, making use of archaeology, architectural history, historical geography and history. Such a book could never have been produced but for the rare combination of buildings which have survived to this day, often in splendid condition, excavation of high standard and an impressive corpus of written records; but it owes its especial distinction to the unusual clarity of the writing and the capacity of the authors to bring the past to life. Here is archaeology which will appeal to the historian, the sort of book which this reviewer wishes he could have read as a history undergraduate, and also history presented in such a way that it should delight the archaeologist (it is gratifying to find the historical content provided by a graduate of the Institute of Archaeology).

After a brief introduction and historical outline Barry Cunliffe discusses the structural sequence as revealed by excavation. He reveals a sequence of some complexity, but some periods of high activity stand out, for example, in the fourteenth century. It was hardly possible for Derek Renn and Julian Munby to maintain his spare approach in their study of the Castle buildings for in dealing with standing structures, which include a Norman keep and a late fourteenth-century palace, something of the social context of their construction is obvious. Nevertheless, the development of the castle is pursued architecturally and provides a most attractive guide to the visitor. Renn reveals a fascinating sequence of a single-storey hall developing into a low tower, somewhat Spartan in its embellishment although its double splayed windows (possibly derived from late Anglo-Saxon prototypes) gave it a certain elegance. Later the keep was heightened and provided with forebuildings and, indeed, various improvements were carried out to strengthen and update the castle's defences down to the building of Assheton's Tower in the third quarter of the fourteenth century. Nevertheless, Portchester was not entirely successful as a fortification and it was rather the convenience of the spot on a protected harbour on

the south coast of England coupled with its attractive situation that recommended it to medieval kings, notably the two equally ill-fated monarchs, Edward II and Richard II. Of the early fourteenth century domestic buildings nothing remains but Munby guides us around King Richard's little palace, revealing that here at Portchester the Royal works were by no means as extravagant as those undertaken for example by John of Gaunt at Kenilworth.

The following section, by both main authors, correlates the sequence and dating of the castle buildings. It is this section which best shows how different categories of evidence may impart particular weight to an episode in an historical narrative. Where very full documentation exists, for instance in the 1320's, we learn rather more from building accounts than simply looking at pits and vestiges of walls, but often full documentation does not exist and evidence for extensive alterations in the middle of the century is largely archaeological. The buildings of Richard II's palace are accompanied by wonderfully full building accounts but the great keep receives no mention in the sources until after it had reached its present and final height late in the twelfth century, probably because it was not earlier in Royal hands.

Most compilers of excavation reports would have left it at that: the sources exist to be searched out and read by a few historians, not by them: the archaeologist should proceed to his pots and bones. In Portchester IV the sections on pottery and other finds are postponed for over seventy pages while Munby guides us through the rich documentary sources for building works; then (with the aid of Elizabeth Gue and John Blair for the accounts for the building of Richard II's palace) he gives us the key texts and lists all other documents. Munby's tables, abstracted from the Rolls, enable us to follow in considerable detail the progress of the Edwardian and Ricardian works, the considerable sums of money expended and the raw materials used. For any excavator the record of building materials used in 1396-9, much of it local but some brought in from as far afield as Devon, will be a revelation. Further we have the names of the workmen employed, from Walter Walton, the master mason who had served under Yevele on Westminster Hall, to local men and others from throughout southern England impressed into service.



It is very useful to have the major sources so well edited and printed. A glossary has been thoughtfully provided and few readers will have much difficulty in puzzling out the simple Latin in which most of them are couched, Latin laced with English and French words as the mood took the scribe.

Cunliffe describes the pottery, most of it regional but a little coming from the West country and a very few sherds of thirteenth-century date from Normandy. The description of building materials, not surprisingly (but certainly most satisfactorily) matches the information given in the building accounts. The Small Finds report is so slim as to demand an explanation. Perhaps the inner bailey was not much used and was kept scrupulously clean, though this hardly squares with the not inconsiderable Faunal remains, presumably the evidence for some quite healthy appetites. Annie Grant studies the Mammalian bones which include the expected bones of domestic animals as well as the bones of roe and fallow deer hunted by the nobles. Jennie Coy writes about the fish bones, suggesting that a considerable quantity of fish was eaten, virtually all of it caught close inshore. Anne Eastham provides a particularly impressive account of the varied bird bones, showing that game birds were especially relished at Portchester and suggesting that by the fourteenth century many of them would have been netted. There is, at least, no evidence for falconry.

As a corrective to all the detailed information assembled on the Castle, Munby now widens our horizons by looking at Portchester in its regional context. This is a triumph of historical writing, clearly the end product of much detailed research, written in fresh, unadorned language accompanied by well-contrived maps and diagrams. He breaks with the conventions of the unattractive 'Harvard system' adopted in the rest of the book, in favour of footnotes which do not encumber the text; his narrative thus flows on unimpeded. The reader ranges with Munby over the region seeing Portchester as one of a number of small communities like Fareham or Havant with rights of common in the Forest of Bere. Its history was complicated by the existence of the Castle, but basically the place can be seen as two manors, the King's manor (held with the Castle) and to the west, the Abbot (of Tichfield's) manor known as Wicor. In 1405, within a decade of the building of Richard II's ill-fated palace, a survey of

all the fields of Portchester designed to distinguish land held from the Abbot with land held from the King was compiled. Unlike the building accounts this interesting survey has not been printed but it has been used to compile a highly detailed map of field boundaries and furlongs and a diagram of the tenements. From this and other documents a picture of an ordinary medieval village community is built up; there are unexpected details such as the below average size of typical holdings on the Abbot's land and the requirement to find twelve foot-soldiers to serve at the castle in time of war. More interesting were the pretensions of leading inhabitants of Portchester to think of themselves as burgesses. Portchester was not a borough but it was nonetheless a thriving mercantile community, though one much dependent on agriculture.

Finally everything is assembled together in a grand synthesis. The reader is brought back to the brief historical outline of the introduction but now all we have learned from historical records and excavation is pooled to enrich a narrative which embraces not merely high events of State but also what food was served at banquets. The admirable reconstruction drawings by Terry Ball, provided to accompany it, are, in our imagination, thronged with people, kings and courtiers, soldiers and craftsmen; peasants labour in the fields beyond, while in the market town at the castle gates we can hear one of the wealthier inhabitants boasting that he is actually a burgess.

The fourth Portchester volume is great fun (of how many other excavation reports can this be said?) and criticism seems superfluous. The production, as I have written, is almost faultless and much of the credit here surely belongs to Sarah Macready, academic editor of the Society of Antiquaries (and another alumnus of the Institute). Alas it appears probable that this is the last Research Report to use the 'hot metal' printing techniques with its superior definition. The drawings are the work of draughtsmen of the Department of the Environment, now 'English Heritage', and attain a very high standard, but 'English Heritage' should take warning that beautiful artwork demands attractive captions and the ugly *sans serif* lettering, a hallmark of late twentieth-century philistinism, employed here should be eschewed in future. The plates are likewise excellent; of particular interest is the drawing from



Norden's survey of 1609 (the text of which, describing the decayed state of the castle at this time, is given on pages 205-6), several eighteenth-century views and a photograph of the keep taken during the 1926 restoration. There is also a detail of Portchester in its setting from the 1797 Ordnance Survey field drawing (which should be reprinted in Volume V). I wish we could have had a few representative photographs of the Pipe Roll accounts and of *Rememoratorium terre de Porcestr'* especially as three pages of art paper remain blank at the end of the volume, but this is criticism levelled after the event. The fact is that this report sets a new, very high standard for reports on historic sites and is likely to be read as a classic by scholars in years to come. It faces Barry Cunliffe (and his co-author Beverlèy Garratt) with a challenge in producing a report on Portchester in the Eighteenth century and Napoleonic period that is anything like as memorable. For the present the reviewer can only conclude by thanking Barry Cunliffe and Julian Munby most warmly for sharing with us their insights into life in and around a Royal castle of the high Middle Ages.

MARTIN HENIG

ROYAL COMMISSION ON THE ANCIENT AND HISTORICAL MONUMENTS OF SCOTLAND. *Argyll: an inventory of the monuments*. Vol. 5. *Islay, Jura, Colonsay and Oronsay*. Edinburgh, Royal Commission on the Ancient and Historical Monuments of Scotland, 1984. xxiv + 402 pp., illus. £58.00.

RITCHIE, Graham and HARMAN, Mary. *Exploring Scotland's heritage: Argyll and the Western Isles*. Edinburgh, HMSO, 1985. 168 pp., illus. £6.95.

BALDWIN, John R. *Exploring Scotland's heritage: Lothian and the Borders*. Edinburgh, HMSO, 1985. 196 pp., illus. £6.95.

There can be few areas of the United

Kingdom which possess, within about 70 square miles, Mesolithic sites, chambered cairns and standing stones, well-preserved Bronze Age settlements, fortified Iron Age sites, Viking burials, Early Christian chapels, Medieval domestic and ecclesiastical sites, an 18th century AD planned settlement with a remarkable circular church, and several whisky distilleries of historic (and indeed of modern) interest. Such is the archaeological and historical heritage of Scotland, and of Islay in particular. The RCAHMS *Inventory of Argyll* Vol. 5 covers the islands of Islay, Jura, Colonsay and Oronsay where over 450 sites are recorded with the detail and accuracy that has become the hallmark of these publications. The presentation of integrated illustrations, begun with *Argyll* 4, has been continued and contributes greatly to the style and overall impression. It is to be hoped that the Commissioners in Scotland do not yield to the temptation of including microfiche as has been done in the recent *Inventory of Northamptonshire* Vol. 5. These Inventories should surely stand in years to come as works of artistic as well as of academic merit.

The Introduction provides a necessarily brief but nonetheless comprehensive outline of the sites and monuments from each period and succeeds in being both descriptive and interpretative. There is a concise account of the Mesolithic sites complete with C14 dates and details of excavation undertaken in the early 1980's. As a result of field survey and excavation undertaken during the preparation of this volume, the known extent of Bronze Age settlements and field systems has been considerably increased. Indeed the number of these inland and upland sites warrants the inclusion of a separate section. Together with similar sites recently surveyed by the Commission in the Borders and Tayside, they promise to provide evidence for 2nd and 1st millennium BC settlement on a scale unmatched south of the border. The traditional terms of fort, dun and broch are retained to describe the Iron Age fortified sites but at least the problems of such classifications are highlighted in the text. Both the symbolism and the stylistic differences of the Early Christian monuments are discussed with detailed references to those at Kildalton and Kilnave. It is unfortunate that the evidence for contemporary domestic settlement does not merit a comparable entry and this is an area where further research and fieldwork would hopefully be rewarded.

Until the balance between the ecclesiastical and the secular can be redressed, this period is in danger of being represented by a series of buildings and objects, the study of which might well develop into 'art for art's sake'. It is good to see that the buildings of the Middle Ages and later periods are presented not only in terms of differing structural and ornamental techniques, but also from the point of view of likely sources of raw materials and the influences of the economic and political background. The changing domestic architecture and series of planned villages on Islay bear witness to the powerful Campbell lairds of the 18th and 19th centuries AD.

There are however some puzzling omissions. The Mesolithic sites are discussed in relative detail but are not listed in the Inventory. We are given separate distribution maps for other categories of prehistoric sites, but not for the Mesolithic. Having gone to the expense of printing 2-colour maps at the end of the volume on which appear the Inventory serial numbers, it seems strange not to have marked any of these earlier sites at all. Admittedly the NGR's are given in the text but the Oronsay middens cannot be quickly located as the Easting is missing from the map. Furthermore we are given a distribution map of Bronze Age pottery and metalwork, but not one of the Viking burials. Small details indeed, but nonetheless minor irritations.

The Inventory itself gives clear and precise details of the sites and is copiously illustrated. There are over 400 photographs and more than 350 line drawings but sadly the handwritten annotations on some of the plans have been partially lost in reduction. The debt owed to aerial photography is considerable and reflects the Commission's current systematic programme of aerial survey. For one who does not know the area well it is of great benefit to be able to compare the plans of Eileach an Naoimh with the aerial view placing the monastery and settlement in their topographical context. Other photographic material varies in quality of reproduction. The definition on the Oronsay Priory graveslabs is excellent but the decorative detail on the Viking material from Kiloran Bay is almost lost. The printers generally appear to have served the Commission less well than it deserves - the print being dark overall. The photograph of the interior of the cruck frame byre at Keils is also used in *Exploring Scotland's*

*heritage: Argyll and the Western Isles* (see below) where the reproduction is lighter and the detail consequently far clearer. It is unfortunate that such minor faults, relatively easily overcome, are apparent in a publication which is otherwise of such a high standard. At a price of £58, *Argyll 5* compares very favourably with *Argyll 3* (£52 in 1980) and is a far more impressive publication.

A new series *Exploring Scotland's heritage*, sponsored by the RCAHMS and edited by Anna Ritchie, promises to fill the gap between general guidebooks and publications aimed at the specialist market. Written for the interested visitor, the series will comprise eight authoritative regional guides, all to be available by the end of 1986, a considerable feat on the part of the publishers. Every book illustrates around 100 of the best preserved archaeological and historical monuments that can be visited in each area. Whilst the bias differs from region to region, hence *Argyll and the Western Isles* is rich in Prehistoric and Early Christian sites, and *Lothian and the Borders* includes a section on 'Industrial Monuments, Bridges and Harbours', they both contain examples ranging from Prehistoric to 20th century AD. NGR's are given for each site together with detailed directions and a graded ease of access symbol includes information for the disabled. Warnings regarding strenuous climbs to some of the monuments are also thoughtfully provided.

The text has much historical and geographical information and there are enough questions raised concerning the interpretation and origin of sites to tempt the reader into further research using the excellent bibliography. The illustrations are of a high standard with some impressive building interiors, particularly of Roslin Chapel. On the whole there is a good balance varying between aerial views to site plans although there is one unexplained duplication where colour and black and white plates of Inverary are included - both taken from the same angle. At the end of each book appear a comprehensive list of museums and descriptions of several excursions of varying distances that can be made to a variety of sites. This series is likely to be of considerable interest to the visitor, and will also provide a brief but sound introduction for the archaeologist or historian to an area with which he is unfamiliar. At £6.95



each, the books are of exceptional value.

Faced with the problem of producing detailed and expensive Inventories at a publication rate far outstripped by the continuing identification of additional archaeological sites, the RCAHMS also publishes the *Archaeological Sites and Monuments Series*. Twenty-four volumes have been issued, the majority covering areas for which, as yet, there is no Inventory. The Commission also produces an annual catalogue of aerial photographs. *Exploring Scotland's Heritage*, aimed at a wider audience, is a very welcome addition to this impressive publication record. Having taken over responsibility from the Ordnance Survey in 1983 for the surveying and recording of archaeological sites, it is to be hoped that the Commissioners' plea for the necessary facilities to enable them to continue these tasks does not fall entirely on deaf ears.

JUDITH HARRIS

ROYAL COMMISSION ON ANCIENT AND HISTORICAL MONUMENTS IN WALES. *An inventory of the ancient monuments in Glamorgan*. Vol. III. *Medieval secular monuments*. Part II: *non-defensive*. Cardiff, HMSO, 1982. xxxviii + 398 pp., 205 figs., 43 pls., 4 col.pls. £45.00.

This volume of the Inventory of Glamorgan is arranged thematically so that all monuments of one specific type are dealt with together. This makes it possible to provide a general introduction to each type of monument before the actual description and discussion of the individual monuments though with houses the general introduction is effectively divided into segments and placed at the beginning of each type and the whole section is arranged typologically whereas the other sections are arranged geographically.

The core of the book is of course the descriptions and their usefulness depends

both on how good the descriptions themselves are and how easy they are to find. The arrangement of the entries enables you to find monuments of a specific type and if you wish to find monuments of a specific area this is possible if you know the civil or ecclesiastical parishes since a list is provided of each with the monuments which occur within them listed. If, however, you wish to find out whereabouts a monument is from the description and your knowledge of Glamorgan's geography is limited and your supply of relevant OS maps non-existent then this is, in many cases, very difficult for though many distribution maps are provided, only some of them have the symbols numbered so that they can be tied to the individual monument; it would seem to be desirable that this policy should be implemented wherever possible on all distribution maps.

The monuments covered are dwellings of various types (platform houses, DMVs, standing houses [in one case now destroyed], granges, etc.), field systems, warrens, roads and miscellaneous (deer parks, cross bases, middens, etc.). The discussion which accompanies them adds usefully to our understanding of medieval Wales. Perhaps the sections of most general interest are those on moated sites and pillow mounds which includes a discussion on them in Wales in general and contains interesting evidence that some moats, at least, replace castles; obviously 13th century Glamorgan was not as unruly a place as often seems to be depicted. However, I find it hard to believe that Bedford Castle moat was merely there just to enclose a dovecot or that the postmedieval spread of rabbits is due to changes in agriculture.

G. J. DAWSON

RENFREW, Colin (ed.). *The prehistory of Orkney, 4000 BC - 1000 AD*. Edinburgh, Edinburgh University Press, 1985. xii + 304 pp., 40 figs., 74 pls., 25 col.pls. £20.00.

The Orkney Islands have been badly in

need of an up-to-date regional archaeology guide for some time, and *The Prehistory of Orkney* has obviously been put together with the intention of filling that gap. Twelve authors, each of whom has excavated or is excavating a major Orkney site, cover the period from the neolithic to (despite the title) Viking times. Renfrew himself contributes an introduction and epilogue. Twenty years ago in the days of Thames & Hudson regional archaeologies a single writer could cover with authority the whole field from (where necessary) the palaeolithic to the Anglo-Saxons, by summarising the published work of his area. Today, with the long gaps which have become inevitable between excavation and final publication, we expect from a regional archaeology not only a synthesis of published material in the light of recent knowledge and perspectives but also interim accounts of the work in progress on excavation programmes which are not going to achieve final publication for some years, and for this a multi-author volume is almost essential.

The proportion of published to unpublished work which the different authors can draw on varies greatly. It is only in Henshall's chapter on the chambered cairns and Graham Ritchie's on the ritual monuments that there is a substantial body of old as well as very recent published material to draw on. Anna Ritchie's site at Knap of Howar is the only known settlement of the fourth millennium, so her chapter on the first settlers is based largely on her own excavations. For later neolithic settlement Clarke and Sharples add considerably to Childe's work at Skara Brae and Rinyo with information from Clarke's own excavations at Skara Brae and the Links of Noltland. Neither they nor Davidson and Jones in their chapter on the environment come to grips with the question of just what environmental and economic conditions permitted the high population in the late neolithic. Clarke and Sharples emphasise the variety of resources available, but surely the key to Orkney's high population then as in post-medieval times lay in its fertile agricultural soils. Yet it is not even clear whether emmer wheat as well as barley was grown in the neolithic. The islands are beyond the northern limit of wheat cultivation today, but may not have been in the fourth and third millennia BC, when warmer, less stormy conditions prevailed.

A virtue of Hedges's chapter on the

brochs is that unpublished data from nineteenth century broch excavations are discussed and three hitherto unpublished plans have been reproduced from the notebooks of George Petrie, the local nineteenth century antiquarian.

Anna Ritchie in her chapter on Orkney in the Pictish kingdom and Morris in his survey of Viking Orkney both deal with centuries in which there are few sites which have been excavated and fewer still which have been published. Their task of synthesis is also greater than in the prehistoric chapters, for they have to take into account historical as well as archaeological evidence. Morris has contributed an impressive summary of the state of present day knowledge of Viking Orkney. He grasps the nettle of the agreement (or lack of it) between the place-name evidence, and the archaeological evidence. 'Quoy' as a settlement name was thought to refer to sites settled relatively late in the Viking period, but at Buckquoy, the only published site which spans Pictish and Viking times, occupation was continuous. The programme of excavation of Viking and Norse sites which is being carried out by Durham and Bradford Universities has great promise for answering these and other vital questions.

Ideally an editor would impose a uniform style and approach on his contributors; but there are really very few compendium volumes where this has been achieved, and most are a good deal more heterogeneous than this. The two extremes of approach are exemplified by Graham Ritchie, who resolutely refuses to hypothesise about the nature of the society which gave rise to the Stones of Stenness, the Ring of Brodgar and Maes Howe, and Renfrew, who now sees social development in terms of 'peer-polity interaction'. In the end it is the material covered rather than the elegance and coherence with which it is done that is the most useful aspect of a book such as this, and indeed the only serious omission is the lack of discussion of the earth-houses or souterrains.

There are over a hundred illustrations, including 25 colour plates. Even with such a number it is surely rather profligate of space to illustrate the dresser in house 7 at Skara Brae three times, and the Ring of Brodgar ditch section twice.

All prehistorians have to visit Orkney



at least once in their lives; for the next few years this will be the single definitive work to carry.

DALE SERJEANTSON

CLARE, T. *Archaeological sites of the Lake District*. Ashbourne, Moorland, 1981. 159 pp., illus. £7.50; paperback £4.95.

The appearance of a new style of guide book to archaeological sites is not a common occurrence, and it provides a good opportunity to look at the market for such books. The style of Clare's book is novel in a number of ways. Having defined a geographic area he does not proceed on a tour, neither does he produce a lengthy discourse on particular types of monuments followed by long catalogues of examples. His method is to divide the sites into five groups, discuss these briefly and then use selected sites as examples. However, it is the treatment of these selected sites which is the unique feature of this book.

Arriving at the site chosen the visitor opens his guide book and finds a surprise. He is not faced with the usual long history of the monument but is taken to a point shown on a plan. Here, by means of sketches, the main visible features are explained. He is then guided to another viewpoint and the same process followed. Thus the book serves the same purpose as a human guide would; it points out features of interest visually and then explains them. The historical aspect of each site is cut to the bare essentials and these are put at the end of the guide section. Once one has grown accustomed to the system the book is easy to use. This writer took a copy on a recent visit to the Lake District and found it a most useful visual guide.

In this particular volume the sites are divided into stone circles and burial mounds, settlements and hillforts, Roman forts, castles and fortified buildings and monastic remains. There is also a short introduction

on the evolution of the landscape. The book is generally not controversial in its text as the author merely attempts to set the scene. Some individual sites do have slightly suspect statements within their text. Thus, the second side of the 'avenue' leading to Skellaw Hill (p.16) is not very convincing on the ground. One or two statements are not quite accurate. The abbey of Furness was not established at its present site in 1123-24, and the monks cannot be said to have 'soon adopted the Cistercian rule' since they objected strongly to doing so.

Any guide book such as this could not hope to cover all the sites in a given area and so there must be an element of selection. Clare appears to have done this well and one suspects he has a good knowledge of his area. A more useful line of enquiry would be to ask for whom he intended the book. The professional archaeologist could probably identify most of the features himself, but it is useful to know what was found, and where, during any excavation. The casual visitor with little archaeological knowledge would not find it difficult to use, but would he buy the book in the first place? Copies of it were not easy to find in the area. The most likely audience is probably that ever growing band of enthusiastic amateurs who like to spend their holidays 'doing the sites'. For them it will be a boon. It is to be hoped that other volumes will appear and with this in mind a plea is made. Please could the format be slightly adjusted so that the book will fit into the pocket.

BRIAN OLDHAM

THOMAS, Charles. *Explorations of a drowned landscape: archaeology and history of the Isles of Scilly*. London, Batsford, 1985. 320 pp., 293 illus., 5 tables, 1 map. £19.95.

Charles Thomas's Prologue explains that this book is neither a complete history nor a total archaeological review of the Isles

of Scilly and that the selection of topics reflects his own work and interests. The reader should take this as a serious warning and should consult the sources quoted if he wishes to obtain an objective view of what is so far known about the Isles of Scilly.

The book is a fascinating mixture of solid information, shrewd interpretation and rather wild fancy, rounded out with much erudition from the byways of knowledge. Charles Thomas's main contribution to Scillonian studies is his demonstration that the well-known progression from a former single land-mass to the many separate islands of today did not reach its critical stage - 'the submergence' - until the Middle Ages. A detailed study of the evidence for dating the stages of the transgression is supported by his work on the early place-names, which convincingly shows that maritime names in the inner area did not appear until English had supplanted Cornish as the common language.

For the prehistoric period he brings together published information in an imaginative account which rings true with its picture of initial settlement c.2000 BC by a few groups from West Penwith; there they had already developed a culture well-adapted to wresting a living from the thin soils of the far southwest, supplemented by the produce of the sea. He emphasises the evidence for a large wooded area in the centre of the early main island (where there is now shallow sea) and a population of red deer, already identified and discussed by Frank Turk. Where he is less convincing is in his proposed model of the early settlements, with suggested 'founder' sites; this is far too dependent on the fortuitous survival of the known sites, in an area which has been subjected to large-scale erosion. Even within the shrunken landscape which remains there may still be important sites to discover: the group of buildings on Nornour, with its deep stratigraphy, was totally unsuspected until 1962.

There is an interesting discussion of the megalithic monuments, now seen as 'territorial markers of ritual origin' rather than tombs; their magic purpose was to counteract the rapid exhaustion of the soil (shown by deposits of fertilising rubbish), although they may have been used for special burials subsequently. It is suggested that the main burial places of the early settlers should be sought in the cairnfields which can still be seen on some of the more exposed hills.

In seeking an interpretation of the religious nature of the Roman-period site on Nornour, already suggested as the most likely explanation of its deposits of trinkets and votives, Charles Thomas treats his readers to a highly imaginative string of hypotheses. He would have us believe in a fire-beacon for mariners tended by devotees of the goddess whose name appears at Aquae Sulis, linked by some rather special pleading to a suggested early version of the name of Scilly. The supposed importance of a natural harbour near Nornour, as the best land-fall for sailors coming from the mainland at Sennen, seems misconceived when the nature and provenance of the finds are considered. Many are from the continent and even the numerous brooches of types made in Britain come from a clearly defined region in the central southern counties. Cornwall has little to do with this 'Roman-provincial' culture and it is likely that the ships which brought the offerers were on longer voyages.

The later date for the submergence leads Charles Thomas to reconsider the Early Christian sites previously regarded as the remote island hermitages of Celtic saints. These, he persuasively argues, are the first churches, each serving its local community. (A note of doubt should be entered against the inclusion of St Helen's as one of these very early churches; Gerald Dunning expressly stated, on the basis of the pottery evidence, that the building in question was not founded until some time after the tenth century: *Archaeol. Journ.* CXXI, 1965, 58).

A chapter is devoted to the island of Samson, deserted since the nineteenth century and still showing a remarkable collection of visible remains from prehistoric times onwards. Its value as a complete archaeological site is rightly stressed; the few archaeological excavations have demonstrated that there is much to be learnt here from what is not visible.

The book concludes with a highly diverting account of Tennyson's visits to Scilly and Cornwall and his identification of scenes from the Arthurian legends, linked with the idea of Lyonesse. The latter is comprehensively debunked but it is suggested that, if Tennyson had got as far as the Eastern Islands, he would have found one early association in the name of the island still known as Arthur.



The illustrations do not come up to the standard expected from this publisher: the half-tones are poorly reproduced and some of the line drawings are weak or over-reduced. The double key system on the distribution maps makes their often important information difficult to extract. In the text there is a system of numbered references to notes at the back of the book, most of which only yield a brief Harvard citation which then has to be checked in the Bibliography.

Charles Thomas has written an enjoyable book which rightly calls attention to the importance of the Isles of Scilly as a unique archaeological entity; it should encourage further research. Because of his evident learning and authority there is a danger that it will be regarded as a definitive interpretation, but it must be recognised as a very clever manipulation of the few established facts; there is much still to learn.

S. A. BUTCHER

**BRADLEY, Richard.** *The social foundations of prehistoric Britain: themes and variations in the archaeology of power* (Longman Archaeology Series). London, Longman, 1984. x + 195 pp., illus., tables. £6.95 (paperback edition only).

This book comprises seven chapters, the main body of which, in Chapters 2 to 6, deals in turn with separate periods starting with the Earlier Neolithic and concluding with the Iron Age. The purpose of each chapter is not so much a simple review of evidence, but the discussion of a characteristic theme of the period. Each theme is considered in the light of traditional models and new ideas. Bradley presents the different and sometimes conflicting models clearly and concisely, drawing his conclusions with a refreshing clarity and honesty. The themes move from a consideration of burial monuments in the Earlier Neolithic since 'The whole scope of this debate is summed up by the paradox that in a period which is defined by its subsistence economy, the most common field monuments

should refer to the dead rather than the living' (p.6), to an analysis of the interaction of British and continental Iron Age peoples: invasion or internal social evolution?

The opening chapter is a statement of intentions and an introduction to the structure of the book, but also stands as an essay in itself, a plea for originality in thought: 'There must always be room for intuition and imagination. So long as these remain we can cope with a few wrong answers' (p.5). The final chapter, a summary of the book, reviews the 'characteristic sequences', concluding with the thought that, in recognising patterns and defining sequences, we are essentially selective of factors which stand out against a background that is too complex to appreciate properly from the present: 'The past is camouflaged and we recognise it when something moves' (p.67).

The discussions of the themes are full of ideas. The book is an attempt to look at what made societies work rather than what societies did, but in so doing, this analysis of power also encompasses the latter. This book succeeds because, no matter whether one finds total agreement with its conclusions, it makes the reader think. This is the hallmark of success because the reader becomes a participant: the book reads as a discussion in which the reader takes part. The result is not merely a catalogue of facts; having forced the reader to think critically and constructively, the book succeeds where far more thorough, but essentially superficial, reviews fail.

BRUCE LEVITAN

**WHITTLE, Alasdair.** *Neolithic Europe: a survey* (Cambridge World Archaeology). Cambridge, Cambridge University Press, 1985. xiv + 363 pp., illus. £27.00; paperback edition £9.95.

The title of this book is apt: Dr Whittle has provided a well-balanced survey

of available information about Neolithic Europe. In chapters 2, 3 and 4 he discusses the period between 8000 and 4000 BC, looking at both the postglacial hunter-gatherer communities of Europe, and the earliest farming groups. In later chapters he looks at changes among agricultural communities in south-east, central and western, and Mediterranean areas of Europe, concluding the survey in the mid-3rd millennium BC in south-east Europe, and at the end of that millennium further west.

The book is well produced, with useful maps, chronological charts, line drawings and photographs dispersed throughout the text. No references appear in the text, but numbered notes give details of books or articles covering particular points, or refer the reader to an author quoted in the select bibliography. The only weakness in referencing seems to be the figures, where drawings are copied after a particular author, without the year of publication being given, or the publication necessarily appearing in the bibliography.

Whittle's chapter divisions vary a little, but essentially include the environment, usually a short section; material sequences, settlement and subsistence (often within the 'social context of production'); and social relations and social changes. In certain chapters other sections cover ritual and burial, and questions of the origins of particular subsistence practices (agriculture and stock-breeding) or human groups (Indo-Europeans). In this way he succeeds in one of his aims, as outlined in the Preface, that of assessing - or at least demonstrating - the varying nature of the evidence for the Neolithic period across Europe.

Another of Whittle's aims is to provide some sort of a synthesis. This seems more successful in the first half of the book, discussing the social contexts in which European societies adopted agriculture, for instance, than in the second. Whittle states that he is trying 'to see as many features as possible of the period as in some way linked' (p.165), and reiterates the importance of the social basis of decision-making and change during the Neolithic period. This is a welcome contrast to the emphasis which has been laid on environmental and economic factors in the past decade and a half, and it would have been interesting if Whittle had developed it a little further in his book. However, the second half - perhaps due to the greater

amount of available information - is densely packed in the sections on settlement and material sequences, and there is not always a synthetic explanation for the differences observed. Why, for instance, were there differences in the social situations which developed in the later 3rd millennium BC in central and western Europe (the east-central part; the Danube to the Rhine and up into south Scandinavia; and northern France, Britain and Ireland) (p.252)? Similarly, in the Conclusion, in which a number of the different trajectories followed in parts of Europe during the Neolithic are outlined, it would have been valuable to read more positive suggestions about the types of social developments which occurred, after the 'tribe' and 'chiefdom' models have been dismissed, however reasonably.

In fact, it would have been very difficult to combine the various ends outlined in Whittle's Preface. He has taken a comparative approach to the varied evidence for Neolithic Europe over a wide geographical area, and he has reiterated the point about social contexts sufficiently to influence his readers. This is a useful volume for the student and the general reader.

PATRICIA PHILLIPS

RENFREW, Colin and SHENNAN, Stephen (eds.).

*Ranking, resource and exchange: aspects of the archaeology of early European society* (New Directions in Archaeology). Cambridge, Cambridge University Press, 1982. viii + 167 pp., illus. £18.50.

This volume of articles is divided into five sections, each introduced by one of the editors. Four of the sections include articles ranging in time from the Neolithic to the early medieval period. There is a preface by Colin Renfrew, and an epilogue by Lewis Binford.

In the introduction to the fifth section, on Contrasting Paradigms, Colin Renfrew discusses the relatively limited impact of



processual archaeology in Britain up to the date of production of the papers (for the 1980 Society of American Archaeology meeting). This section includes papers by Britons (Gledhill and Rowlands, and Hodder), advocating a more theoretical approach by archaeologists, though from differing points of view. Gledhill and Rowlands urge the choice of more appropriate units of study than societies in reformulating a materialistic explanation of socio-economic change, while Hodder wants to study the ideational and belief contexts surrounding ranking in societies. The conflict between these two viewpoints is discussed by Renfrew in his preface to the section, by Robert Whallon in the third article in the section, and by Lewis Binford in the epilogue. The latter two writers also review the other contributions to the volume. There are strong differences in emphasis, with Whallon desiring "'scientific' explanations of more general significance and applicability" (p.156), whereas Binford and Renfrew are more pragmatic in their requirements. Renfrew says that there is no necessity for the theoretical to have 'some supreme priority over the factual' (p.143). Binford emphasises that while the archaeologist deals with the material phenomena, he needs to justify the theories he espouses, and that this justification is missing in most of the papers.

In re-reading the volume, description can be seen to bulk largely in nearly all papers, with relatively little space being devoted to justification or testing of models, though Susan Shennan, Stephen Shennan, Andrew Fleming, Paul Halstead and John O'Shea, in their contributions, seem to devote rather more space to this aspect.

The volume, despite its internal contradictions, seems valuable to this reviewer on a number of levels. First, Renfrew's Preface to the volume provides a useful general discussion of ranking (as demonstrated in settlement archaeology, monuments, and the burial treatment of individuals), and of socio-economic change (as demonstrated by intensification, exchange and peer polity interaction). Secondly, the individual contributions can be read as informative articles on different aspects of European prehistory and early history (from the role of amber in the Bronze Age to population pressure and land-use in prehistoric and historic Greece). Thirdly, the critical discussion at the end of the volume provides a

point of departure for future work.

PATRICIA PHILLIPS

JARMAN, M. R., BAILEY, G. N. and JARMAN, H. N. (eds.). *Early European agriculture, its foundation and development, being the third volume of 'Papers in economic prehistory' by members and associates of the British Academy Major Research Project in the Early History of Agriculture, written in honour of Eric Higgs*. Cambridge, Cambridge University Press, 1982. x + 283 pp., 113 figs. £25.00.

'Early European Agriculture' marks the culmination of a decade of research by the British Academy Early Farming Project based at Cambridge and directed for many years by the late Eric Higgs. It is appropriate to stress that the enlightened and stimulating views of Eric Higgs form the theoretical basis of the book, which provides a clear summary of one peculiarly British outgrowth of the 'New Archaeology' of the mid- to late-1960s.

Dissatisfaction with the 'developmental stages' view of the evolution of man and his economies, with the fixation on individual sites to the detriment of their territories, and with conventional diffusionist views on the origins of European agriculture led the project to formulate the 'palaeoeconomic' alternative in two earlier volumes - 'Papers in Economic Prehistory' (PEP) (Higgs 1972) and 'Palaeoeconomy' (PAL) (Higgs 1975).

The volume on 'Early European Agriculture' (EEA) consists not, as in PEP and PAL, of a series of chapters contributed by independent authors but of a unified text written by Jarman, Bailey and Jarman on the basis of their own studies and contributions by Anderson, Bahn, Barker, Bay-Petersen, Maclean, Mills, Sakellariadis, Vita-Finzi, Webley and Zvelebil. Whilst the editorial touch has usually been lightly applied, the uniformity of the final text conceals divergences of

view which are of sufficient significance to merit discussion (viz. Barker's views on the interpretation of land-use potential in Yugoslav soils). There is no doubt, however, that the consistency of this editorial approach makes the volume much more readable, based as it is on a clearly identifiable theory and methodology.

The central objective of EEA is, we learn, 'to arrive at principles of economic behaviour which are stable in the long term, and which have far-reaching evolutionary importance' (p.viii). Whilst the dogmatic rejection of alternative approaches to pre-history so characteristic of PAL is moderated in this volume, readers are left in no doubt of the primacy over the social of the economic, the latter seen as 'a biological linchpin exposed to the full force of natural selection' (p.5). This unabashed economic determinism distinguishes EEA from other variants of the 'New Archaeology' who also were concerned to identify the general laws and regularities of human behaviour. This distinctive style reflects the evolutionary paradigm borrowed by Jarman, Bailey and Jarman from biology. The prime mover favoured in EEA is population pressure, distinguished from sustained population increase and considered as an ever-present long-term factor conferring selective advantage over those with more productive over less productive economies. Echoing Leslie White's neo-evolutionary viewpoint of the 1940s, this functionalist paradigm ignores the issue of individual versus group selection and offers little theoretical or empirical support for the notion of ever-present population pressure. The serious flaw of the near-impossibility of defining carrying capacities for any given environment or technology is not discussed, and none of the non-deterministic approaches to population studies of the last decade is taken into account. Given the availability of a range of sophisticated population models, the selection of a crude demographic determinism is perhaps the most serious theoretical drawback in the volume.

More impressive is the development of Site Catchment Analysis as a means towards an assessment of economic potential independent of direct economic evidence. Most previous criticisms of SCA are rebutted but the question of the extent to which a site territory is actually used is answered only by an assumption of the long-term use of optimization strategies. Although it is conceded that the principles of SCA are more

appropriate for non-hierarchical than for hierarchical settlement patterns, it is clear that SCA is an irreplaceable tool for the integration of off-site and on-site data.

A categorisation of economic strategies is attempted on two levels: a definition of 3 economic 'niches' - mobile, sedentary and mobile-cum-sedentary - and an opposition between 2 types of exploitation - direct (opportunistic) versus indirect (controlled) exploitation. Lurking beneath the latter dyad are the ecological concepts of r- and K- strategies, notions still hotly debated in a discipline in search of its own overarching theoretical framework. In terms of the exploitation and domestication of plants and animals, 6 types of man-animal relations are defined (random and controlled predation, herd following, loose and close herding and factory farming) as well as 5 types of man-plant relation (casual and systematic gathering, limited, developed and intensive cultivation). However, the definition of archaeological correlates for such categories is likely to prove elusive, despite their behavioural significance.

Allowing that the main field data collected refers to survey data rather than excavation, the methodology employed is a battery of SCA techniques, in which exploitation territories are analysed according to land use potential. One of the crucial proposals is that, for farmers without iron tools, there was an inverse relationship between soil fertility and soil tractability. If this view is correct, large areas of heavy, fertile soil-classes (clays, loams, most alluvium, chernozems, smonicas, etc.) were uncultivable in the Neolithic and Bronze Age, leaving an unavoidable impression of a pastoralist bias to most European economies. Such an opinion ignores the successful experimental cultivation of heavy soils using wooden ards in both England and North Germany, and surely distorts the importance of crop cultivation in the Neolithic. A more serious omission is that these 'economic' analyses take little account of natural- and cultural-transforms (Schiffer, 1975) especially gross geomorphological changes. An example from Italy is the discovery of sites buried under the alluvium of the rivers on the Tavoliere, a class of sites ignored in the economic analysis of early farmers in that zone. It is also true that the site distributions used are rarely related to the survey method by which they were found.



The case studies which occupy two-thirds of EEA are ordered according to their niche within three zones: coasts, lakes and littorals (Denmark, Cantabria, Poland, Nordfriesland, Norrland, the Bodensee, Sub-Alpine Italy); the lowlands (Thessaly and Greek Macedonia, Romania, Yugoslavia, the Tavoliere, Hungary, Austria, Bavaria, Upper Rhine valley, Little Poland, Northern Italy, Paris Basin); and the uplands (Cantabria, French Pyrenees, the Apennines, Northern Italy, the Carpathians). A final chapter discusses the economic evidence pertaining to clusters of megalithic remains (Cantabria, Catalonia, France, Ireland, North Germany, Sweden, Britain). Given the original attack on zonal prehistory in PEP, it is ironic to see that economic zones re-emerge, relatively unscathed, in EEA.

For areas of coasts, lakes and littorals, it is stressed that strandlooping economies are rare because of their low economic potential except in areas of unusually high marine productivity. The Ertebølle-TRB transition in Denmark is explained as the replacement by cereals of shellfish and perhaps fish populations declining because of environmental change. In several areas (eg. Cantabria, Friesland) molluscs and fish were interpreted as safety-valve resources, to be used in time of shortage. But here the preservational bias against fishbone is rarely taken into account, with the result that fish are consistently undervalued as an economic resource. Although otherwise excellent, the Bodensee section fails to clarify a problem first defined by Tim Gates - namely why the sites are so close to the lake edge.

The lowlands of Europe are divided into 2 sections on the basis of topography, growing season and soils - zones of high-arable potential and zones of low-arable potential (including most lake and littoral areas). The hypothesis is that the earliest farmers colonise the former first, bringing the full 'Neolithic package' of settled village agriculture on to the latter a millennium or so later. On this basis, the Neolithic colonisation of Europe was not a continuous if thin spread of people, as in Ammerman and Cavalli-Sforza's wave of advance model, but relatively small, isolated pockets of relatively dense population on intensively cultivated permanent arable soils with intermediate areas where slash-and-burn or little agriculture was practised. The mobile-cum-sedentary nature of Neolithic economies in North Greece and Romania is clear, given the assumption of

constant pressure on grazing resources. The section on Yugoslavia disputes the conclusions of Barker (1975a) on land-use potential in an attempt to redress the agro-pastoralist balance. In an interesting re-analysis of Kruk's (1973) classic study of Little Poland, EEA argues that settlement changes are most economically explained by population increase from least to most marginal soils, and that Kruk's notion of a decline in agricultural intensity/productivity per unit area with time is the reverse of the usual pattern. The introduction of the plough, indeed any aspect of the Secondary Products Revolution, are not mentioned as possible alternative models.

The section on the uplands is perhaps the least complete and representative, aside from the obvious principle of the integration of complementary resources. The section on the French Pyrenees is less complete than Bahn (1983), the Apennine material is a summary of Barker (1975b) and the analysis of the Carpathians is restricted to one small basin (even here, the nature of tell settlement and craft production is not mentioned).

The main theme of the megalithic enquiries is the inverse relationship between areas of high-quality arable and concentrations of megaliths. EEA's alternative to Renfrew's notion of megaliths as territorial markers for shifting agriculturalists is, predictably, the idea of territorial markers for mobile pastoralists, fulfilling the function of regulating access to grazing land. However, as more systematic survey in upland areas produces new information about long-term or permanent sites (eg. on the southern Meseta), the possibility of alternative strategies of upland exploitation comes ever closer.

On the technical side, the production of EEA is of a high standard, with a consistently good set of figures (alas without a list of illustrations) and a triple index (general, names, sites and cultures). Printing errors are few and far between (p.157, Dimbovița for Dimbovița; p.159, Dobj for Dolj; p.195, Lusation for Lusatian) and the typeface is pleasant and easy to read.

In general, EEA swims against the 1970s tide of setting human behaviour in its social context, of building non-deterministic explanatory models and of stressing the importance of cultural diversity rather than universal laws. In this sense, EEA remains a

child of the 1960s, a devotee of the eco-techno-economic determinism which stimulated a later generation of archaeologists to take relations of economic production more seriously. Perhaps the twin achievements of the Early Farming Project have been to make prehistorians revise their ideas about pathways to domestication and to provide a theory and methodology for Site Catchment Analysis. The confession of Jarman, Bailey and Jarman (p.ix) cannot, however, be overlooked: 'Many of our hypotheses can only be adequately tested when on-site archaeological data are available that have been collected with these propositions in mind'. The work of the Project remains unfinished and only with such new data can the integration of economic and social theory be fully realised.

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JOHN CHAPMAN

WALDREN, William H. *Balearic prehistoric ecology and culture: the excavation and study of certain caves, rock shelters and settlements* (BAR Int. Ser. 149). 3 vols. Oxford, British Archaeological Reports, 1982. xxiii + 773 pp., 81 pls., 12 plans. £40.00.

The publication of Dr Waldren's thesis makes a meaningful step forward with regard to Iberian archaeological work, albeit in a very limited area. A sites study of such depth is an outstanding exception to the general style of numerous past Spanish publications. Nowadays, fortunately, Iberian archaeologists are fast catching up with European trends and techniques and modern methods are in use in most current excavations (vide *Son Fornes I: La fase talayotica*, Gasull, Lull and Sanahuya, BAR Int. Ser. 209, 1984).

Dr Waldren describes and discusses his Majorcan sites in great depth and detail. He concentrates especially on Muleta cave (dated to around 5000 bc) and the rock-shelter of Son Matge, both in the north-west of the island and both possessing a deep stratigraphy (an unusual feature in most sites of the archipelago) and a huge number of remains of *Myotragus*. He also, more briefly, studies sites of lesser importance and later date, also caves and rock-shelters, such as Muertos-Gallard, So'n Marroig and So'n Puig. He continues the prehistoric sequence in Majorca throughout the Chalcolithic, the EBA, the MBA, the LBA and the Iron Age, taking us through these various periods using his own particular new nomenclature, and ends with the Talayotic and the post-Talayotic which brings us well into Roman times. His excavation and collection of samples techniques are admirable in conception and execution, although the reviewer remembers that it was sometimes difficult to adhere to them in the hurly-burly of hectic fieldwork.

*Myotragus* on Mallorca receives excellent extensive treatment under every conceivable scientific angle and this section is one of the best documented of the book (Appendices ID, IE, IF and IG). The author's idea of dividing his book into three sections certainly makes it easier for both reading and reviewing.

The plates of Part III are of a high



standard and here again the scheme of having a separate book for the plates appears necessary, especially as they are referred to correctly in the text. Although it is somewhat tedious to have to look for the plates in a separate volume, this procedure seems sensible in view of the size - and weight! - of Parts I and II.

The author uses his material, much of it from his personal excavations, to draw conclusions with which many other workers in the same field are not in agreement. To begin with, his suggested new nomenclature only further complicates an already overloaded system. We who work mainly in the two smaller islands have already had perforce to accept the terms 'pre and post Talayotic' although their application to the Pitiussae is singularly inapt since neither talayots, taulas nor navetas exist here. But to have to add 'Pre-Settlement, Early Settlement, Neolithic Early Ceramic periods and the Early and Late Beaker phases' to our vocabulary will not appeal very much either to excavators with publication in mind or to students and researchers in general.

Dr Waldren's 'Successive waves of cultural influences arriving from abroad' (p. 45 *et sequitur*) seems contrary to the current popular theory of local evolution, following the first initial exterior impact, under the stimulus of the advent of new methods and ideas rather than to various subsequent arrivals of actual people. However, his 'arc of immediate influence', ie. the Eastern Pyrenees, Catalunya, the East Coast of Spain and the Midi, is a most helpful hypothesis which is daily receiving corroboration and he does admit that there exist no 'abrupt lines and delineation' (*sic*).

But this reviewer's main criticism, apart from the presence of far too many misprints, syntactic errors and misspellings in a so-highly priced book (did no one revise the bibliography? - a glance through its contents provides a glaring example of the lack of careful proof reading, rather typical of the general layout), is the use of the word 'Balearic' in the title. In reality Dr Waldren's study is limited to certain sites on Majorca alone; the other three main islands of the archipelago receive but scant attention. In Part I Minorca, Ibiza and Formentera are barely allotted three pages between them in the General Remarks and only slight, sometimes erroneous, references are made to them in Part II. An instance of this

occurs in Appendix IA on p.484 where the author states that 'no material other than pottery has been found which can be used for dating this important site' (Ca na Costa, a megalithic chamber tomb on Formentera), whereas human bones from within the chamber were analysed at the British Museum Laboratory by the C14 method and gave a date of  $1600 \pm \text{B.C.}$  (BM 1677). Incidentally, the author cites only an incorrectly-spelt-and-dated, and also incomplete, Spanish article concerning that same site whereas the original report, of which the Spanish version is but a truncated translation, is written in English and published in the *Bulletin* of the Institute of Archaeology volume 13 in 1976.

Since we are referring to megalithic monuments it seems appropriate here to point out that Dr Waldren, writing in 1982, complains on p.25 that 'Ibiza has only recently produced evidence of prehistoric man (as yet unpublished)' although the megalithic monument of Ca'n Sargent in that island was reported in 1979 in *Bulletin* 16 of the same journal above mentioned. The C14 dates of both megaliths, taken from samples of human bone, are given in *Radiocarbon* vol. 24, pp. 251 and 282. In fig. 63 (Pt. I) Dr Waldren describes the two incised sherds from Ca na Costa as 'Balearic Beaker ware', a statement with which not only the excavators of the monument but also many other archaeologists, both British and Spanish, who have had the opportunity to study them closely, are in unanimous disagreement. As for the beautiful black and burnished incised fragments from a Formentera cave, they bear no more relation to Beaker ware than does, for instance, the Mildenhall bowl from Lion Point, Clacton. Local workers are entirely satisfied with the nomenclature 'Incised wares of classes A and B' and Dr Waldren's Beakers fail to convince most of us. The Oxford Conference in December 1985 will serve as a tilting ground, as was already foreshadowed at the Deyá Conference of September 1983. If, as Dr Waldren proposes, his beakers are equivalent to our 'Incised A' wares it must be noted that none of these has so far appeared in the neighbouring islands of Ibiza and Minorca.

The second largest island, Minorca, receives only superficial attention. The fact that *Myotragus* also existed in this island (there are some specimens of this animal lodged in the archaic museum of Ciudadella as well as in private collections) is briefly mentioned. Dr Waldren's view of

artificial caves having been cut for use as water storage receptacles, and not for burials or rubbish pits, is not in agreement with local opinion of archaeologists who have worked on the sites he mentions. The hand-cut wells have recently been the object of study and the results appeared in a local publication. One of the best-preserved and best-known is located close to Torralba d'en Salort which somewhat invalidates the pit-water-storage theory, to this reviewer's mind.

Very recently proof has come from Minorca, at Son Mercer de Baix, that metal-working was practised there. A *copper ingot* was found in conjunction with plain crucibles and also a bronze bracelet, an awl and a chisel, but the pottery accompanying these finds only consisted of undecorated wares of Class B and *begleitkeramik*, yet another instance of metal-working without a trace of Beaker. And it must be noted that no sherds bearing any relation to Dr Waldren's illustrated in his Plate 38 have so far been found in Minorca (personal assurance given by Planatamor and Rita).

All in all this book is a welcome addition to the ever-increasing literature concerning the Balearic archipelago during the prehistoric period and a gigantic pioneer attempt to advocate and emphasise scientific methods of excavation and sampling in future Iberian archaeological activities. The work would have greatly gained had a Spanish summary been added at the end, as was done in English to the BAR International Series publication mentioned in the first paragraph of this review.

CELIA TOPP

DEUTSCHE FORSCHUNGSGEMEINSCHAFT. *Archäologische und naturwissenschaftliche Untersuchungen an Siedlungen im deutschen Küstengebiet. Band 1. Ländliche Siedlungen*, edited by G. Kossack, K-E. Behre, P. Schmid. Band 2. *Handelsplätze des frühen und hohen Mittelalters*, edited by H. Jankuhn, K. Schietzel, H. Reichstein. Weinham, Acta Humaniora, 1984. 461 pp., 136 figs.;

453 pp., 205 figs. DM260.00.

This pair of volumes demonstrate what can be achieved with well-directed and financed archaeological research projects on a scale which has never been matched in the British Isles. The German Research Council has provided the wherewithal for systematic survey and excavation of the late prehistoric and early medieval settlements of the coastlands of North Germany in Lower Saxony and Schleswig-Holstein. Rural settlements from the 5th century BC to the 11th century AD are the subject of the first volume. Some of these are well known to British readers, notably the *Wurt* at Feddersen Wierde and the settlements, cemeteries and field systems of the Flögeln district, thanks to English summaries of the evidence published in British Archaeological Report volumes such as B. Cunliffe and T. Rowley, *Lowland Iron Age Communities in Europe* (1978) and M. Jones and G. Dimbleby, *The Environment of Man* (1981). In the rural settlements volume, the excavation and specialist techniques are described first and the environmental setting established, before a discussion of building forms and settlement organisation, concluding with a discussion of field systems and evidence for the agricultural economy.

A similarly systematic approach is adopted in the second volume devoted to trading centres of the early and high middle ages. This concentrates on the extremely important excavations at Haithabu (Hedeby), a Viking-Age trading settlement which was succeeded during the 11th century AD by the town of Schleswig, a short distance to the north. The methods adopted in the excavations of 1962-1969 are described and the results of contemporary systematic field walking are also presented. Dendrochronology proved an invaluable aid to the phasing of the site and a discussion of this aspect and the range of building methods used in the settlement are summarised in English in a recent red BAR volume: H. B. Clarke and A. Simms, *The Comparative History of Urban Origins in Non-Roman Europe* (1985). For those prepared to get out their German dictionaries, this second volume provides a valuable interim report, including a brief discussion by Ole Crumlin-Petersen of the ship he excavated in the harbour at Haithabu in 1979-80, a vessel in the Scandinavian clinker-built tradition, whose closest parallel is the second Skulde-



lev vessel, a long ship, and the further discovery of at least two other wrecked vessels in the harbour area in 1980.

Both volumes are to be warmly welcomed and, who knows, the British Academy may yet be shamed into putting adequate finance into project-based archaeology here, following the example of the German Research Council and its equivalents in Denmark and elsewhere in western Europe.

MARTIN WELCH

BELTRAN, Antonio. *Rock art of the Spanish Levant*. (The imprint of man.) Translated by Margaret Brown. Cambridge, Cambridge University Press, 1982. 91 pp., 37 figs., 2 maps, 63 pls. £9.95.

LEROI-GOURHAN, André. *The dawn of European art: an introduction to palaeolithic cave painting*. (The imprint of man.) Translated by Sara Champion. Cambridge, Cambridge University Press, 1982. 77 pp., 30 figs., 63 pls. £9.95.

These two books are part of a projected series on prehistoric art - 'The imprint of man' - to be published in several languages and edited by Professor Emmanuel Anati. Professor Beltran's book is basically an updating of his 1968 standard work in Spanish on the rock art of the Spanish Levant, while Professor Leroi-Gourhan includes in his book material that has not before been covered by him.

Both books, being richly illustrated, are aimed at a wide market but neither author seems to write down to the audience. However, academic usefulness is impaired in both cases by lack of index and list of plates and, in Beltran's book, even lack of enumeration of the plates so that they may not be specifically referred to in the text. While Beltran includes a site-by-site bibliography for his subject, Leroi-Gourhan gives only a short list of major general works. Leroi-Gourhan

assumes his readers will have a basic knowledge of European palaeolithic cave art and thus offers only a sketchy background to the subject, with no maps or photos of the geographical settings of the caves.

Beltran's approach will be more comfortable for the newcomer, with a distribution map of the sites, plates showing the decorated shelters and rock surfaces in their setting, and step-by-step discussion of the characteristics, context, and archaeological and cultural connections of the art. He is concerned to present a general and less technical picture of Levantine rock art and reviews the history of its study and its conservation on site (incidentally, allowing himself the luxury of both censuring those who spray water on the art to make it more visible and publishing photos of images that have been treated in just this way). In contrast to the palaeolithic parietal art, there is no deep cave art, very little engraving, no polychromy, and the paintings in red, black or, occasionally, white, while frequently showing animals on their own, display many scenes of vigorous human activity such as hunting animals, gathering food, fighting, dancing and so on. 'Generally, standards are inferior to those of palaeolithic art, though Levantine art surpasses this in its expression of movement and vitality' (p.25).

In respect of the Levantine art he states: '...the theory of evolution from naturalism/realism to stylized or schematic art is not absolutely demonstrable, although the general tendency may prevail. In either case, it is wiser not to propound unduly clear-cut chronological theories when they are based on artistic sequence' (p.27). Almost no direct dating evidence exists for this art and what is available seems inconsistent. Hence, Beltran's relative ordering of the art rests mainly on '...the evidence of overlying colours and styles, stylistic development and on the hazards of comparative method' (p.72). After reviewing past and present theories, he suggests five phases - sometimes overlapping - of chronological and stylistic progression starting with simple linear and geometric paintings after 6000 bc, through a naturalistic phase up to 3500 bc, complex scenes after 4000 bc, a phase contemporary with the neolithic of the coastal plains between 3500 to 2000 bc, and a final one of rigid stylization from 2000 bc until it died out with the arrival of eneolithic schematic art. While there may originally

have been influences from the palaeolithic traditions, Levantine art developed in its own unique way and has no parallels elsewhere.

Leroi-Gourhan's book on the earlier traditions is by no means an easy read. It represents his attempt to establish analytic categories and terminology for the palaeolithic art of the caves. Technique, form, space, animation and time, the message, the actors, and the content of the message are among the chapter headings; the images are classified as pure geometric, geometric figurative, synthetic figurative or analytical figurative in form and might display diachronic superimpositions, oblique symmetry and so on: a work of art history, then, rather than archaeology. As in his previous books about cave art, Leroi-Gourhan produces unnecessary near-gibberish when he deals with numbers (eg. on p.49 'A-horse 27%, B-bison + aurochs 28%, making 55%' are said to represent roughly two-thirds of the whole bestiary, and then on p.67 we are told these animals comprise around 60% of the figures), while his efforts to apply formulae relating to the layout of animal images on the cave walls are hardly more convincing, being difficult to follow and full of exceptional cases. The overall effect of this treatment is one of 'sciencing', but if one does not take it too seriously, all may be forgiven because the text is short and provides many opportunities to study the very fine plates (mostly without credits - as with Beltran's book), which surely must be the main purpose of this series.

ALEX HOOPER

**DAMS, Lya.** *Les peintures rupestres du Levant espagnol.* With a preface by Louis-René Nougier. Paris, Picard, 1984. 334 pp., 232 figs. (incl. maps and tables), 50 pls. 550 FF (until 30.6.86).

This book, arising from Lya Dams' doctoral thesis at the University of Toulouse-Mirail, deals with the current state of knowledge about Spanish Levantine rock art

and is now the standard work on the subject. Some 7600 paintings (together with a very few engravings) contained in 235 rock-shelters at 133 sites in Eastern Spain are usually assigned to the Levantine style and to the mesolithic period (and sometimes also to the end of the magdalenian). However, the fact that similar rock paintings have been found in the foothills of the Spanish Pyrenees and that not one single relevant site or painting has been firmly dated by archaeological methods, allows for much argument over designations and dating.

Dr Dams' approach is to review the art, shelter by shelter, and to analyse the themes found therein. She continually informs her analyses with better-dated comparative data from the upper palaeolithic as well as from the neolithic and later times.

Many of the images have been overpainted - perhaps, for unknown reasons, to refresh their appearance, or to alter them slightly (eg. changing the shape of a cow's horns), or to change the species of the animal first depicted (eg. from cow to deer) - or have been added to, making the original subject part of a scene (eg. with the addition of archers and arrows, making a hunting scene). Dams reiterates Professor Beltran's point that probably many more than we know of the surviving representations have been overpainted, because sometimes it is only by a slight change in outline that otherwise unsuspected overpainting becomes apparent.

From these frequent cases of overpainting it is possible to make a tentative judgment about which figures and themes were prior and which later and, together with the fauna, objects and activities portrayed, to collate this information into a dating schema. Dams comes up with four styles and relates these to the various climatic phases and their faunal, cultural and archaeological (using the results of the most appropriate excavations nearby) concomitants from 11000 to 4000 bc or so. Her four styles go from the archaic, through the classic, to 'the great scenes' and then 'the triumph of movement and the transition to schematism'. This last style may show anecdotal scenes of stylised human beings engaged in hunting, battle, execution (or, possibly, sacrifice), dancing, gathering (especially of honey) and farming activities. 'This particular phase is immediately followed by the transition to the purely schematic and abstract rock-art of the sedentary farmers and cattle-raisers'



(p.10).

While Dams' deductions from the paintings on the rocks are judiciously done and are on the whole not at all objectionable, especially when seen within the broad context of writings about rock art, it is appropriate here to point out that every individual case of artistic output is special: although all art takes place in a cultural context - with all that implies as regards conventions and techniques - it is very feasible that an artist may fail to carry out his intentions, because of lack of proficiency or merely by error; and the compiler of stylistic categories should be constantly aware of this while dealing with the representations.

The production of this book is good, the colour plates are fine, and the black and white figures reasonable. The maps, however, are unnecessarily poor. If this were rectified and if even a rudimentary index had been attempted, then one would have no misgivings about recommending this work without qualification.

ALEX HOOPER

YULE, Paul. *Early Cretan seals: A study of chronology* (Marburger Studien zur Vor- und Frühgeschichte 4). Mainz, Phillip von Zabern, 1981. xiv + 246 pp., 41 pls., numerous text figs. DM135.00.

While the general development of early Cretan glyptic has been understood for some time, this book is the first attempt to analyse and evaluate systematically the types of evidence available for dating the large corpus of early Cretan seals (2173 seals and 437 sealing designs). Yule considers the material from various standpoints: stratigraphy, typology, motif, style-group, material and technique. These strands of evidence are to some extent interdependent, but Yule recognises the pitfalls of circular argument. If his datings are sometimes tentative, this is to

be commended at this stage of our knowledge. Future work might apply Yule's methods to refine further pre-palatial dating: many seals are left with an EM II - MM IA 'date' - a period spanning some 600 years.

Yule excludes forgeries from this study (p.xii) but a number of seals conforming to his typological definitions and which seem acceptable on grounds of context or motif do not appear. Without a list of his dubitandae it is difficult to know whether they have been omitted deliberately or by oversight.

Yule does not state how he reached his identifications of materials used for specific seals. Occasionally he emends the CMS identifications in notes; usually he follows the CMS designations: CMS III 182 and 207 ('bein') - both in fact ivory. Conversely, he classifies all 28a rings as ivory although nine Lenda examples are correctly published in CMS as bone. Yule acknowledges the difficulties of differentiating between these materials (p.195) but a consistent approach and clear indication of changes to published identifications are needed since the use of bone or boar's tusk rather than ivory may have chronological or economic implications.

Yule's clear definitions, lists of seals by class, motif and style-group and his own superb illustrations make this an excellent reference book, not only for students of Cretan glyptic, and should stimulate further research. It is a pity that a good book is marred by mis-spellings and an idiosyncratic approach to references.

O. H. KRZYSZKOWSKA

RICHMOND, Sir Ian. *Trajan's army on Trajan's column*. London, British School at Rome, 1982. 56 pp., 24 pls. £6.50.

The re-issue of Sir Ian Richmond's masterly articles on Trajan's Column (1935) and on the three Roman monuments at Adamklissi (1967) must be warmly welcomed. Not only is it most useful to have the two works

bound in a convenient form with enlarged photographs of a much improved quality as illustrations to the former article, but also the re-issue offers a challenge to workers in this field to take stock of the advances made in the study of the Roman Army in the last fifty years.

In preparing this publication Mark Hassall has very wisely not attempted the impossible task of co-ordinating the texts of the articles which lie somewhat uncomfortably together. The later article is in fact the text of a lecture (given in 1960) - and shows it; in particular it noticeably lacks the detailed footnotes of the other. There are also other inconsistencies, often minor, between the two articles, for example, 'vexillarius' (p.7) and 'vexilliferi' (p.50), but these are of little matter when the genius of Richmond's observant eye is considered.

His detailed descriptions of selected scenes from Trajan's Column combined with the comprehensive commentaries remain an incomparable model to all who would attempt an analytical task of this nature. Apart from a number of points overtaken by the discovery of new finds, there are a few others on which one might take issue. For example, 'crests are stowed away, as always on active service' (p.13) is a direct contradiction of Caesar's commentaries and Marcus' Column, but surely the simple explanation is that the plug-in bronze helmet crests have gone the same way as the plug-in spears.

The discussion of the monuments at Adamklissi, being originally a lecture, takes the form of a more flowing commentary with the *Tropaeum Traiani* being given the lion's share of the study. The article ends with a discussion of the art, purpose and date of the *Tropaeum*.

This leads on to the one real criticism of the new publication, the somewhat misleading title which omits any reference to the Adamklissi monuments; even the cover picture is of Trajan's Column. Perhaps *Trajan's Army in Bas-relief: Trajan's Column and the monuments at Adamklissi* would have been a more apposite title. This point aside, the select bibliography added by Mark Hassall provides a useful quarry of more recent work relating to the subjects under discussion by Richmond.

Although the price might seem rather expensive for 54 pages of text and especially to those who might already have taken (in days

of yore) complete copies of the original articles, the quality and size of the photographs and the convenient form of the texts make this re-issue an essential possession for any student of the Roman Army in the field.

Today, 50 years after the publication of that major stepping stone in the study of Trajan's Column, the time is surely right for a renewed assault upon its problems. Richmond's text and the new composite photographs prepared by Amanda Claridge provide a model for a much needed major new publication, preferably in English, on this monument to:

'The even trench, the bristling mound,  
The legion's ordered line'.

NICHOLAS FUENTES

WIGHTMAN, Edith Mary. *Gallia Belgica*.  
London, Batsford, 1985. xi + 385 pp.,  
44 figs., 40 pls. £19.95.

In general, a really good book ought to have a long and detailed review. In particular, when faced with *Gallia Belgica*, there are a limited number of ways of saying that a book is brilliant, and the repetition of superlatives becomes tedious. I will take a chance on the next four years and nominate this as my 'book of the decade'. When I did this with Weitzman's *Late Antique Book Illumination* for the 70's, no later challenger arose, and I can see no remote hope of any other book equalling this before the end of 1989 (the end of my decade).

The excellence of this work comes as no surprise for Edith Wightman had been working away at it, and talking about its ideas, and discussing problems for some time. Each May would bring her to London for a few days in the Institute while she re-acclimatised to Europe and set off for further work and study. As she moved chronologically through the subject she tuned in to the problems which were exercising people, and the way that they were



being discussed, so that all the current preoccupations are dealt with, and on each, there is a judicious summary, a personal view, and a sensible suggestion for the future. This ranges from the Iron Age background (Ch. 1 and 2), which seems to me to reflect the work being done at present by prehistorians rather than the usual classical picture of what prehistorians thought twenty years ago which is the usual first chapter in a Roman book, to the problems of the fifth century (Ch. 13 and 14) in which current arguments and beliefs are succinctly synthesized.

Between these limits come chapters on Romanisation, urbanisation, the countryside, the economy, the thriving Romanised province, the Gallic Empire, Belgica re-organised, the later Empire, later cities, the later countryside, later trade, and Christianity. The sources throughout are well balanced so that the material is given its head and the written evidence is alongside to act as counter-balance. The work that has gone into such a summary of discovery and excavation is enormous and the need to compress the information to 311 pages of text has given a very concentrated result. These pages took me about 20 hours to read, and, even then, I recognise that I took in less from some of the equally packed pages than others.

It seems to me that the most important thing about the book, given that it has the relevant facts, and that they are correct, is its tone. Throughout this is pleasant and eminently sensible. There is no hesitation in saying which of two divergent views the author thinks is correct, but in deciding between the views she feels no need to cast doubts on the sanity of either protagonist, nor to scold him or her for being 'wrong'. This is a great achievement and should be held up as an example to aspiring writers, for it shows that she has mastered her subject and feels confident of her mastery. She never displays that sour pique which strives to establish an unsure superiority. And then there is the flood of downright common sense which picks up each subject in turn, rather as one would pick up a playful puppy, holds it by the scruff of its neck until it has quietened down, smooths it out with a few deft strokes, and puts it down in the sure knowledge that it will continue its wilful way.

But Edith was a pleasant and sensible, if sometimes excitable, person. Was, because

she was killed in 1983 at the time she was turning a manuscript into a book. These qualities live on in the book and that will have to substitute for the annual knock at the door and the entry of a tall, rather angular figure with a firm Scots accent, who would then turn the next few hours into a fast-moving discussion of what was new in Roman Europe.

RICHARD REECE

BONFANTE, Larissa. *Out of Etruria: Etruscan influence North and South* (BAR Int. Ser. 103). Oxford, British Archaeological Reports, 1981. ii + 173 pp., 122 pls., 10 maps. £10.00.

*Out of Etruria* is primarily concerned with the part played by the Etruscans in the transmission of knowledge and culture from the Mediterranean world to their neighbours in Italy, including the Romans, and to the peoples of temperate Europe. From the 8th century BC onwards, the Etruscans learnt, assimilated and adapted to their own needs much from the east Mediterranean and Greek worlds and from that time to the virtual extinction of their culture by the time of Augustus they often held an innovating and educating role among the peoples of Italy and their influence reached across the Alps. This book draws together several previously published articles, which illustrate this theme; here, they have been augmented, revised, carefully integrated together and presented in English.

The book is divided into two parts, in the first of which LB discusses various aspects of the society of the Situla People of the upper Adriatic area and of their art, principally as represented by the decoration of their metalwork. In the first chapter, she traces the many close connections between Etruria, and especially the north Etruscan styles as exemplified at Murlo near Siena and at Chiusi, with those imitated by the Situla Peoples; these influences begin in the 7th century, may be seen at their strongest

during the 6th century but continue later. They include the use of the human figure in representational art, fashions of dress, personal equipment and household furniture, together with customs such as military parades, games including chariot races and boxing and banqueting scenes. Yet in many ways the Situla Peoples were slow to change; they did not develop the urban life of cities nor follow the Etruscans in adopting the stories of Greek mythology. Rather, their fine representational scenes with human figures show real life and, in Chapter 2 and mainly drawing upon these scenes, the author presents a vivid evocation of society among the Situla Peoples, demonstrating that it was very much a man's world, in which the chieftains wished to see themselves depicted with all their symbols of status, but also perhaps sometimes reflecting a heroic past. Chapter 3 enlarges upon some long-lived artistic motifs, notably the two-bodied monsters with a single head and animals with a human limb dangling from their mouths, tracing their transmission from east Mediterranean or Greek origins, through Etruria and the art of the Situla People into transalpine Celtic forms, and on into Medieval times. In Chapter 4, LB gives a full description and discussion of the Corsini Throne, concluding that it is a Roman archaizing monument, probably of 1st-century BC date, which follows a form of chair best known in Etruria and with decorative friezes recalling those of Situla art. Here, the author emphasises a continuing Italian preference for artistic representations of real ritual acts, such as processions or other ceremonies, in contrast to the sophisticated Etruscans, who borrowed Greek mythology and so often depicted its stories (p.85).

The second part of the book discusses some questions of language and the diffusion of the alphabet. In the first chapter, LB considers the word *triumphus*, its possible origin, and its passage from Etruscan into Latin, probably in the 6th century BC together with some of the cherished symbols of office and state ritual of Rome. The last two chapters are by Giuliano Bonfante and summarise the evidence of the languages of the Situla Peoples, Rhaetic, Venetic, Illyrian and Gallic, and suggest that the German word *erz*, meaning 'metal' or 'bronze', derives from the name of the Etruscan city of Arezzo, famous for its metalworking. Finally there is a succinct description of the diffusion of the alphabet from the Euboean Greeks of Magna Graecia to the Etruscans, thence to Rome and other neighbouring Indo-European peoples of

Italy and from north Italy across the Alps to Germany, before the Roman conquest of the Po Valley, there to become the ancestor of the Germanic and Scandinavian runes.

The book is the result of a very wide learning on the part of both authors and is presented in a particularly clear manner. The maps and illustrations are well selected and the Bibliography and Notes are full. In all, *Out of Etruria* expands and illuminates an important theme, the educating role of the Etruscans in Europe, a theme all too often minimised by archaeologists and classical historians. Though wine-drinking (pp.2-3) and the other Etruscan influences outlined above were important, there is little doubt that the transmission of the alphabet was the greatest contribution Etruscan civilisation gave to its neighbouring peoples and this ultimately spread to some of the furthest outposts of Europe. As noted on p.i, it is clear that ancient travellers crossed the Alps more easily than some modern archaeologists but this book will do much to rectify the tendency and ensure that the educating role of the Etruscans in Europe is acknowledged.

ELLEN MACNAMARA

FREDERIKSEN, Martin. *Campania*, edited with additions by Nicholas Purcell. London, British School at Rome, 1984. xviii + 368 pp., 15 pls., 5 maps. £15.00.

The tragic death of Martin Frederiksen saddened Campanologists (p.315, n.79) in particular, and we owe a great debt to Nicholas Purcell for gathering, editing and rounding out the papers that were left into a perhaps surprisingly well structured whole.

The book, handsomely printed by Lasercomp at Oxford, covers a broad spectrum of topics, ranging from geological background and detailed topographic study to rigorous Quellenkritik of, eg. Livy, who comes out well, and Diodorus, who does not. Purcell has been generally successful in keeping up-



to-date with work in progress and grafting these results on to the original drafts, dating in some cases to the 1960s; this very process illustrates how approaches, especially to socio-economic matters, have changed in a relatively short period (although one does miss any considered treatment of the role of coinage in the area). Nonetheless, most avenues of interpretation are explored in that complex of relations between the heart of the territory, in particular of course Capua, and successively the Greek colonies, the Etruscans and Rome. The lengthy analysis of relations between Capua and Rome is particularly valuable, as is also the assessment of the manner of exploitation of Campanian resources from period to period.

In the early chapters there are useful treatments of pre-Greek Cumae (p.64) and caution on the Greekness of Pompeii, tucked away a little on p.108, n.26. Cristofani's caveat on the date of the slags at Pithekoussai (*Forme di Contatto...376-7*) should have been noted, and the treatment of the Campanian *koine* of architectural terracottas would have been better for illustrations. Among the slightly worrying number of niggling errors and wrong references one should stress that the Cumaeen alphabet arrived in Etruria, not Cumae (p.58) and the vases discussed in n.53, p.79, are from Gela not Pithekoussai. Connoisseurs of error in MS tradition will be interested in some changes arising seemingly from aural misunderstanding - 'singly' for 'simply' (p.93), 'order' for 'other' (p.264). The reference at the beginning of n.4, p.355, should be *Hesperia* 51 (1982), 338ff. The early Italic fibulae from Olympia are now published by H. Phillip, *Ol.Forsch.* XIII, 286ff. P.83, n.153, overstates the case for both the reading and origin of the 'Megarian' dedication to 'Hera-kles' from seventh century Cumae. On the other hand, we can add a further possible Daunian at Pithekoussai, Dazimos, who cut his name on an amphora there in c.600 (p.136). While due attention is paid to the distribution of imported materials over the centuries, the discoveries of Attic black-glazed ware need closer treatment (and indeed initial publication in many cases) before we can be as confident about its general frequency in the fifth century as on p.167. A reference to the new fragment of the 'Teian curses' (*Chiron* xi [1981], 1ff) would have been highly relevant to the discussion of relationships between mother-city and colony (p.197). The circular assembly buildings of Metapontum and Paestum were destroyed before

the rise to popularity of the amphitheatre in Campania, but could the two yet be related in some way? In the treatment of business interests and practices (p.320) we find some surprising wording: 'Additional information can be added from other literary sources and even' (my italics) 'from such accidental survivals as the cargo of a ship wrecked....'.

A major asset of this volume is the sheer amount and range of material that has been distilled from a plethora of sources, by no means all easy of access, into a generally highly readable series of essays. Would that it had been the complete volume that its author had intended. Nonetheless we will all now be able to scan the fields of Campania as they inch past the FS window with properly focussed eyes.

ALAN JOHNSTON

AUBIN, Gérard. *Corpus des trésors monétaires antiques de la France*. Tome III. *Pays de la Loire*. Paris, Société Française de Numismatique, 1984. 141 pp., 7 maps. Fr.180.00.

LORIOT, Xavier and SCHEERS, Simone. *Corpus des trésors monétaires antiques de la France*. Tome IV. *Haute-Normandie*. Paris, Société Française

With two more volumes of the corpus of Roman coin hoards in France the series is firmly under way and is producing all sorts of questions and ideas about the distribution of coins and coin hoards in France which will only be answerable when the last of the ?21 volumes has appeared. The distribution of the first four volumes is firmly North and West and we are not told what volumes are in preparation so that whatever comes next will be as much a surprise as all the rest, except that the present distribution already conforms to archaeological distribution maps in general where the vital point is the presence of research workers rather than of material to be studied. Thus, Hiernard, Bost and

others put the area of Poitiers first in the field, Aubin accounts for the Loire, and Lorient and Scheers for upper Normandy. I would guess that Brittany is on the way, that Bordeaux will not be long in appearing, Toulouse may be moving and the western part of Provence, but, with such a comprehensive, and determined, organisation no area will be allowed to fall behind.

When I reviewed the first volume I said that the basic structure was settled and that there was little point in arguing about it. Did I, asked M Lorient, one of the directors at a recent conference, want to argue about anything? I thought not. But the question of more comprehensive reporting of coin finds, including site finds, does appear many times in Aubin's text (Vol. III), and it looks as if France, and then perhaps even Britain, will have to think about the matter seriously.

The uneven distribution of coin hoards in modern France becomes more apparent with each volume published. In these two volumes the 80 or 90 hoards for the coastal *département* of Seine-Maritime compared with about 42 for Sarthe or just over 30 for Vendée follow earlier differences between the area of Poitiers and the Pas de Calais. Hoards of the fourth century seem to be more common towards the north-east, whereas isolated finds of gold coins of emperors around 450 to 475, such as Libius Severus and Zeno, stay more to the South and West. Hoards of the second century are more typically bronze than silver in contrast to Britain where the opposite is true. Jean Hiernard's maps continue to guide us clearly and attractively to the find spots.

There is an enormous amount of work still to be done; I wish the project continued success and look forward to the final product.

RICHARD REECE

HILL, Donald. *A history of engineering in classical and medieval times*. London, Croom Helm, 1984. xiv + 263 pp., illus. £18.95.

Donald Hill in this work has set out to explore the engineering practices of the Classical and Medieval periods. He has deliberately omitted military engineering and has concentrated on civil engineering, although the two cannot be entirely separated as the army was heavily involved with Imperial construction during the Roman period.

Briefly the book covers three main areas: civil engineering, mechanical engineering and fine technology. Geographically he covers Western Europe and the Near East, an area which he sees as a technological whole.

Within the book a number of accepted views have been challenged, discussing Roman roads - 'It has sometimes been suggested that the purpose of the roads was primarily military, but this is not the case'. But if we look at the roads built on the extremities of the Empire their chief Imperial function must always have been the provisioning of forts within their vicinity. But it is nevertheless true that the military role has been over-emphasised in the past and obviously a road would serve many travellers and a change in role through time is to be expected for any section of road.

The re-introduction of watermills into Western Europe is seen as not happening until the mid-eighth century AD, although recent dendrochronological evidence from Ireland has shown a mill to have been in existence in the seventh century AD (see Baile, 1980). The whole field of watermills in the pre-Norman conquest period is still poorly documented and would clearly repay further study.

Traditionally it has been accepted that the windmill was introduced into Western Europe from the Near East, although the evidence has always been slim. This has been challenged and an origin in Western Europe is suggested which is supported by the fact that the windmills of the Islamic world used horizontal sails while the windmills of Western Europe owed more to the mechanism of the Vitruvian watermill, although the idea of harnessing wind power was probably Near Eastern in origin.



The chief strength of this book, besides being a very concise and detailed survey of classical and medieval engineering, is that through Donald Hill's knowledge of Islamic engineering he has been able to place it alongside the contemporary western technology. This has not only made the technology of Islam more easily accessible, but has shown how far in advance of the West Islam was in many areas until after the Renaissance.

#### References

Baile, M. 1980. Dendrochronology - the Irish view. *Current Archaeology* VIII, 2: 61-63.

W. D. COCROFT

GARNSEY, Peter, HOPKINS, Keith and WHITTAKER, C. R. (eds.). *Trade in the Ancient Economy*. London, Chatto & Windus; the Hogarth Press, 1983. 232 pp., 1 map. £15.00.

This volume contains 14 contributions. Hopkins gives a scene-setting, and therefore generalising, introduction and Cartledge ranges widely on trade and politics in archaic Greece. Millett on loans and credit in 4th century Athens and Mossé on the world of the Emporium in speeches of Demosthenes deal mainly with non-material matters from historical sources as do Pleket on urban elites and business in the Greek East of the Roman empire and Whittaker on later Roman trade and traders. Garnsey deals with grain imports to Rome and Thompson with grain transport down the Nile in Ptolemaic Egypt, leaving five papers based mainly on pottery - Goudineau on Marseille, Rome and Gaul, 3rd-1st century BC, Tchernia on Italian wine in Gaul at the end of the Republic, Garlan on Greek amphorae and trade, Carandini on pottery and the African economy, and Pucci on the more general aspects of pottery and trade particularly in Italy in the Roman period.

Only Snodgrass fails to fit into a

bracket with heavy freight in archaic Greece. This may sound forbidding but it is written with a light touch - unlike many of the other papers which range from the enjoyable to the terribly earnest - is immediately approachable and comprehensible, and makes its points on the probably low level of trade at the time with sureness, style and economy. Garlan brings a welcome air of scrutiny to amphora studies in the Greek East, and Goudineau and Tchernia sparkle combatively in translating their amphora fragments into human and economic terms. For someone like Tchernia, whose name has been linked to the study of amphorae so deeply and for so long, this sparkle totally belies the idea that eminence in pot study leads to dullness.

Pucci bases himself firmly on his knowledge of the Italian fine pottery industry but then ranges very widely, trying to get us to think about production and consumption, the nature of towns, markets and purchasers, users and slave production. He writes well, lightly, persuasively and with enjoyable style. Carandini emerges from the archaeologists' corner ready for his bout with quick pre-emptive strikes at all and sundry; he proceeds to chase the ancient historians round the ring with heavy body blows of African pottery typology and, just when they show signs of flagging, he dazes them with great questions on the fall of Rome and the nature of medieval recovery. Sound, enjoyable and very thought provoking.

All that is missing is the opposition, the historians who hate archaeological material, who are castigated in most of the papers. Perhaps the material approach has now won?

RICHARD REECE

KENYON, K. M. and HOLLAND, T. A. *Excavations at Jericho*. Vol. 4. *The pottery type series and other finds*. London, British School of Archaeology in Jerusalem, 1982. xix + 647 pp., 259 figs., 12 pls. £65.00.

KENYON, K. M. and HOLLAND, T. A. *Excavations*

at Jericho. Vol. 5. *The pottery phases of the Tell and other finds*. London, British School of Archaeology in Jerusalem, 1983. xlvii + 864 pp., 368 figs., 40 pls. £75.00.

With the publication in rapid succession of Volumes IV (1982) and V (1983) the great series of Kathleen Kenyon's Jericho excavation reports is complete. In particular Volumes IV and V complement the two parts of Volume III on the stratified deposits excavated on the tell by providing detailed information on the pottery and extensive appendices on other classes of material from those stratified deposits.

Volume IV contains six major chapters describing and illustrating period by period and in copious detail the type series of pottery from the tell, from the Pottery Neolithic, the Proto-Urban, the Early Bronze Age, the EB-MB period, the Middle Bronze and Iron Ages. The volume is completed by seven varied appendices by different specialists on: stamped jar handles of Iron Age and Hellenistic date; textiles, matting and basketry; figurines; metal objects; bone tools and other bone objects; loomweights and spindlewhorls; and finally a tomb catalogue and distribution list of tomb material.

Volume V consists of ten chapters in which the pottery of each Stage and phase in each trench or square is described and illustrated, and cross-referenced to the great type-series in Volume IV. A vital part of the volume is the set of charts which tabulate for each trench and square the frequency of pottery of the various periods against the Stages into which the stratigraphy was condensed. Sixteen appendices fill the latter 400 pages of the volume; some of them (like that on stone vessels, ground stone tools and other objects, or that on the flint industries) are very large, and others of them (like the gem-like essay by Edith Porada on a single cylinder-seal, or the two pages which constitute the report on the animal remains) are very short. In addition to those just mentioned above, there are appendices in Volume V on: a further 19 radio-carbon dates from the British Museum laboratory; scarabs and seal impressions; charcoal species identifications; copper metallurgy; greenstone amulets; beads; stone maceheads; other miscellaneous small finds; the provenance of the mollusca. Finally there are two

appendices consisting essentially of lists: the first lists additional pottery of Proto-Urban and Early Bronze Age date which was omitted for various reasons from the appropriate type-series catalogues in Chapter IV; the second lists the distribution among 27 museums and institutions of registered tell and tomb artefacts.

Every user (reader would be the wrong term) of these volumes will have grouses, and it is important to recognise that some of these complaints are likely to be the inevitable concomitant of working with large and complex reports, while others arise from the effects of distant hindsight. Although the recent volumes are so expensive that few private scholars will be able to contemplate their purchase, it would be unfair to compare the prices of these new volumes with those of Volumes I and II, published 20 years ago. It is sad that such an important excavation publication will be available only in a relatively few institutional libraries, but the prices bear comparison with other major tomes of recent years, and offer much better value for money than many slim volumes of transient theory currently pressed upon us from certain publishing houses at £25 or £30.

Another complaint which will undoubtedly be heard likewise requires consideration from a broader perspective: if the whole style of the excavation report, with its concentration on pottery, typology, stratigraphy and relative chronology, seems frustratingly old-fashioned, it must be remembered that the field research programme was conceived at the mid-point of this century. It must be a sobering thought that an excavation programme which was so well-devised and precisely targeted, so efficiently and economically carried through in the field, and so painstakingly worked up and published represents more than 30 years of work: but it should not be a surprise that archaeology has changed its ideas somewhat in the meanwhile.

For many would-be users there will be some disappointments: this publication will not be of much use for those who have an essay to prepare by Monday, for those who simply wish to learn something of the archaeological actuality of this famous Biblical city, or for those who wish to find out about Jericho at a particular period (as it might be, Jericho the Early Bronze Age city). Now that we have all the publication of the tell, we find that we are presented with an enormous quantity of material, but no synthesis.



Early in Volume IV (p.2) there is a telling explanation of this lack of final comment: 'With regard to general conclusions, both time and the very heavy expense involved ... have dictated the omission of detailed assessments of the pottery connections among the stages of occupation from site to site on the tell and between the tell and tomb types'. On the one hand this may seem an extraordinary view of what might be meant by 'general conclusions': on the other hand one can scarcely bear to think of the sheer volume of hard work, expertise and concentration that have gone into the report and its preparation, let alone contemplate how much more labour would be involved in order to digest it thoroughly. In this regard Volumes IV and V are great mines of information, meticulously assembled, carefully checked, sorted, put in order, and, at a low level of integration, made sense of. It is a tragedy that, for a general assessment of the Jericho excavations, we must rely on Kenyon's *Digging Up Jericho*, which was written before the major study of the results had taken place: how much one would give to read the same author on the same subject, but written now!

For many these volumes will go much too far. How many of us will need to refer to the 3457 individual vessels described and illustrated in Volume IV alone? For others the volumes will not go far enough. These tomes are works of reference, quarries or mines in which the enquiring reader can dig and hew unheedingly and with slow profit. For such users, the specialists who need to delve to the ultimate minutiae, there will be other frustrations, not least of these being insufficiency of detail. For all the great quantities of information, one knows that below what is published lie further levels of documentation which will sooner or later become essential for the solution of the problem in hand. That raises the difficult questions of what constitutes 'full' or 'final publication', how reports should be made available to the scattered, isolated specialists who need them, and whether the days of these great, expensive, betwixt-and-between tomes are numbered. These are not, however, questions to be discussed (still less answered) here. The researcher mining information will in any case know of the general and philosophical hazards, but needs to be warned of the practical difficulties of working in these particular quarries.

If one is lucky one may wish to pursue a subject which is encompassed fully in one

volume, but for the most purposes the user will need both Volume IV and Volume V, and probably both parts of Volume III as well. For example, if one were concerned with the pottery of a particular period, then that is synthesised in the type series in Volume IV; but if one wished to verify that a particular type occurred only in that period, and not in the previous period, then one would certainly need the less processed data of Volume V. In the introduction to Volume V (p.xxix) the authors write that 'It is hoped that this format will assist in correlating individual phases from one area to another', but anyone wishing to undertake that kind of enquiry will need both parts of Volume III as well. Before one buys the volumes one should ensure one has the space at home to open the four volumes simultaneously. Before going to the library to borrow them, be warned that the four volumes weigh almost 6.5 kg, or 14 lbs.

But that is not all. Many of the appendices are quite incomplete in themselves and need considerable supplementation. Edith Porada writes in Appendix 6 of Volume V of the important cylinder seal from Tomb J3. If one wishes to review this in the context of the other seals, then consult her Appendix F in Jericho II; and refer to the tomb context itself in Volume I. This kind of fragmentation is not at all uncommon in multi-volume works of this type; to a great extent it is inevitable, and some of it is no doubt a result of a deliberate and hard choice between publishing when the information is ready (and splitting up subjects among different volumes) or holding early reports until everything is ready (and thereby withholding information perhaps for a decade and more).

However, these are not going to be easy works to use, when subjects are split up among different volumes of the publication, and parts of what one might have expected to find in the final report are not here because the data were previously published in a learned journal article or locked in an unpublished dissertation. If one were interested in the copper industry of Bronze Age Jericho (leaving aside the cemetery material in Volumes I and II), one would find the material split between an appendix on the artefacts themselves by Dr Holland in Volume IV and an appendix on the metallurgy employed by Dr Khalil in Volume V. Dr Khalil, however, gives no actual data in that appendix, referring the reader to the unpublished PhD dissertation in London University and an article on metallurgical practice co-authored with H-G. Bachmann and published

in *J.Hist.Metallurgy* 15 (1981). Richard Burleigh discussed the radiocarbon dates available to 1979 in Appendix C of Volume III, but since then a further 19 dates have been obtained in the British Museum Laboratory, and these are discussed (and calibrated where appropriate) in Appendix D of Volume V. If one wishes to estimate the effect of calibration on the dates collected in the earlier appendix in order to view all to the same standard, one needs to have to hand the journal *Radiocarbon* 24 (1982), which was not of course available in 1979.

Perhaps the most taxing example of the need for supplementary documentation is that of the basic food economy of, for example, the aceramic neolithic settlement, surely a subject which a good number of prehistoric archaeologists would wish to pursue. Dr Maria Hopf deals with the floral material and Dr Clutton-Brock with the faunal material, both appendices appearing in Volume V. Dr Hopf's appendix supercedes her preliminary review published in that seminal work *The Domestication and Exploitation of Plants and Animals* of 1969, and she tells us that 'some of the earlier conclusions have to be either rectified or altered'. She does not specify which conclusions are now proved incorrect or in need of modification, and that book has become so embedded in traditional scholarship that one must perform a careful collation of texts followed by selective memory reprogramming. Dr Clutton-Brock's appendix on the faunal remains is quite different, and offers us the briefest of synopses in one and a half sides. All the actual data and the detailed discussion have already been published, and one should refer to Ucko and Dimbleby (1969), where she attacked the carnivores, to *Levant* 3 (1971), where she ruminated on the primary food animals, to *Proc.Prehist.Soc.* 45 (1979), for more chewing over of the mammalian remains, and a very important article on the sheep co-authored with H-P. Uerpmann in *J. Arch.Sci.* 1 (1974).

That there is much yet to be discovered in these mines of information should not be in doubt. The symposium organised at the Institute by Peter Parr in spring 1985 to celebrate the completion of the Jericho publication showed that, for a number of the papers were based directly on the Jericho data now published in Volumes IV and V and demonstrated that the information could, by dint of much hard work, be made to yield higher and exciting levels of interpretation. As it happened, or perhaps for good reason,

all those papers were confined to the periods with pottery. For the pre-pottery periods, which of course do not rate a chapter in either Volumes IV or V, the task of research or synthesis will be that much harder. In passing it is extraordinary to note that the aceramic neolithic settlements, whose investigation was one of the primary objectives of the excavation programme, and whose importance was recognised by Kenyon and the world of archaeology from the start, receive no coherent treatment. The relevant plans, sections and accompanying stratigraphic detail can be found throughout Volume III, together with an appendix on the burials and human remains, while all the artefacts, seeds, bones, charcoals, radiocarbon dates, etc., are dealt with in the series of appendices.

However, it should not be thought that it will be all dark drudgery, for at every turn there are attractive and encouraging gems which glint and beckon, even at first reading. Such examples could be almost endlessly multiplied, for many classes of artefact or material from the appendices, or for any period on the tell. As a more or less randomly chosen example from my notes, from Joan Crowfoot Payne's 138 pages on the flint industries, which is packed with illustrations, frequency diagrams and tables of statistics, I extracted the total figures for obsidian and flint because the specific obsidian totals had caught my eye. I was surprised to find that the mean percentage of obsidian in the Proto-Neolithic period was 2.1% of all chipped stone, and checked to make sure that all the samples were statistically large enough to be reliable. In the following PPN-A period, which Burleigh's consideration of the radiocarbon dates places in the second half of the 8th millennium bc, percentages of obsidian rise to a mean of 3.2%, while in the much more 'international' PPN-B period the mean figure for obsidian falls abruptly to 0.63%.

Looking a little more closely within the PPN-A period, where many of the samples numbered several thousand pieces of chipped stone, one finds that amounts of obsidian vary enormously from trench to trench and layer to layer. Trench E is generally rich, averaging 7.7%, while in one part of the period, Stage VI, the amount of obsidian peaks at 15.4%. How can these statistics be related to Renfrew's model of early neolithic exchange systems in the Near East (Renfrew, Dixon and Cann in *Proc. Prehist.Soc.* 34 [1968])? What is to be made of the varia-



tions from period to period? And how may one interpret the highly localised variations in the PPN-A period?

As a last comment it must be said that in the final analysis Kenyon's great strength as an interpreter of excavated evidence comes through in a quite extraordinary and unexpected way. In appendix after appendix one finds specialists alluding to interpretations of Palestinian archaeology and Jericho in particular which we can readily label 'Kenyonian'. The innocent reader should be wary of them, for it is often difficult to see whether the specialist is interpreting the particular material concerned as supporting the Kenyonian view, or whether the Kenyonian view has been taken as the definitive framework within which the evidence is to be understood. As random examples one may cite G. Talbot (Vol. V: 709, on the lack of marine shells in the EB-MB tombs in contrast to the preceding period), 'Can this mean that the new settlers came from the landmass to the east of Jericho rather than from the coastal regions?'; Dr Hopf (Vol. V: 578, on the crucial question of the beginning of cereal cultivation at the Jericho oasis), 'The crop plants [of PPN-A Jericho] must have been introduced as such from territories further North by the invaders following the Mesolithic hunters and seasonal settlers on the tell'; and Dr Clutton-Brock (Vol. V: 802, on the sudden leap in importance of sheep and goat as contributors to the food-supply at the beginning of the PPN-B period), 'The question remains whether the sheep and goats of this period were indigenous or whether they were brought to Jericho by the immigrating PPNB people'. In this context it is a nice irony to recall on the one hand that radiocarbon dating was heralded as a method of obtaining dates independent of the archaeological assumptions and inferences, and to note on the other hand that the statistical analysis of the radiocarbon dates relating to the pre-pottery neolithic periods reported by Dr Burleigh (Vol. V: 760) may also be taken as supporting the Kenyonian application of the invasion hypothesis to the arrival of the PPN-B period.

I make no apology for not attempting a thorough and balanced criticism of the two volumes discussed. It will be years yet before we are in a position to assess the full archaeological significance of these reports, because they open so many galleries for exploration, and so much work still needs to be done. The useful function of this

review is to report and draw attention to the contents of *Jericho* Volumes IV and V. The completion of the publication of such an important excavation programme is a major event, a cause for gratification among all would-be users and for congratulation to all those many who have contributed. The set of volumes will stand as a landmark in the history of excavation publication, just as the excavations themselves have served as a reference-point for so many subsequent excavators. In twenty years or a quarter of a century someone may count the many articles and several doctoral dissertations which will surely derive from the availability of this publication, the excavation records, and the rest of the physical product of the excavations, housed in museums around the world.

TREVOR WATKINS

HADIDI, Adnan (ed.). *Studies in the history and archaeology of Jordan I: papers presented at the First International Conference on the History and Archaeology of Jordan held in Christ Church College, Oxford, 15-31 March 1980*. Amman, Department of Antiquities, 1982. 399 pp., illus.

HADIDI, Adnan (ed.). *Studies in the history and archaeology of Jordan II: papers presented at the Second International Conference on the History and Archaeology of Jordan held at the Amra Hotel, Amman, Jordan, 4-11 April 1983*. Amman, Department of Antiquities; London, Routledge & Kegan Paul, 1985. 358 pp., illus. £35.00 the set.

These two finely produced volumes present the product of the first two international conferences on the history and archaeology of Jordan. The conferences, which are intended to be the start of a triennial series, were held under the patronage of the Crown Prince and the sponsorship of the Department of Antiquities. The first was held in Oxford in 1980, and the second in

Amman in 1983, and the two publications have emerged with admirable and commendable promptness. For the speed with which these two books have been produced the contributors, editor, printer and publishers deserve congratulations.

In his editorial preface to the first volume Adnan Hadidi reports that the purpose of the conference was 'to place Jordan on the map of archaeological research'. It has been the deliberate policy of the Kingdom of Jordan and its Department of Antiquities to encourage international co-operation in archaeological research within Jordan, and there has been a great upsurge of interest among archaeologists and historians from Western countries, and a consequent revolution in the volume and quality of our knowledge. By their promotion of such conferences the Jordanian Department of Antiquities hopes to create more interest in such research in Jordan. The rapid publication of the papers from the conferences obviously serves to further that objective, and the editor of the volumes explains that speed has taken priority over stylistic regularity and uniformity.

In fact, the technical quality of the published product has suffered very little in the quest for prompt publication; these are two handsomely hard-bound volumes, finely printed on high quality paper, and the advantage of having the publication now rather than later well outweighs any minor irritations. What was noticeable was the variable quality of the text-figures: whereas the half-tones have been reproduced excellently, some of the line-drawings have been over-reduced or have printed unevenly. It should be stressed that this stricture applies to only a few of the very many illustrations.

The second conference had a specific theme, 'The Jordanian Environment: Geographical and Historical', which is very much reflected in the 43 papers presented in the publication, most of which discuss either the environment itself and environmental history, or in some way the relationship between man and the physical environment in Jordan. It must be said that one of the implicit purposes of the second conference conflicts with the publication of the papers, in that some of those who were invited to the conference were not there on account of the recent primary research which they had conducted in the country's history and archaeology. Consequently, some papers in each volume are rather light in weight,

somewhat contrived for the occasion of the conference, or indeed generalised or peripheral to the Jordanian focus. In this regard the second volume is not unlike many Festschrifts. One can appreciate that some of the papers may have been useful in bringing in information about specialised techniques or particular approaches for the benefit of the audience and their hosts, or were enjoyable in the context of the conference itself, and not too demanding to listen to; but it has to be admitted that they have little to contribute to the publication. At a crude count, and discounting subjectively and harshly what is light, contrived or marginal, more than two thirds of the volume is important, front-line material. Curiously, this stricture does not seem to apply to the first conference and its volume: almost every single article reports on recent, personal research carried out by the author. Since there are 49 contributions in the first and 43 in the second volume, we have much to be grateful for.

With so many papers on such varied subjects, it would be hopelessly biased and invidious to select some for special treatment, while ignoring the majority. Instead it may be useful to summarise the contents by period and subject, omitting only those pieces which are highly generalised or rather slight in content. In passing it is surprising to note that almost all of the contributions are in English (in the first volume, all but eight [six in French, one in German and one in Arabic], and in the second all but five [three in French and two in Arabic]).

The first conference seems to have had no special theme, and consequently the papers are that much more varied. On the other hand a greater proportion of them seem to be first-hand reports of primary research rather than general reviews. After the initial papers by Adnan Hadidi (surveying Jordan's cultural heritage and the role of the Department of Antiquities) and Vita-Finzi (briefly illustrating the major changes in the physical environment during human history, and pointing out that Jordan's present state cannot tacitly be extrapolated into the setting for any archaeological or historical past), the papers are laid out in broadly chronological order. The chronological emphasis is clearly towards the later periods. There is only one contribution (Henry) on the Palaeolithic period, and Kirkbride's general survey article on the final Mesolithic and Neolithic is the only one on those periods. Hennessy



has a valuable essay on Teleilat Ghassul and the Chalcolithic period, which is answered by a second essay by Robert North, ostensibly on the absence of Chalcolithic remains at Jericho. There are several contributions set in Bronze Age times (Helms on the interaction between the EB walled settlements and the nomadic populations in the semi-arid and arid zones, Schaub on the origins of the EB walled settlements, Ortnier on the human remains from an EBI tomb at Bab edh-Dhra, Redford on Egypto-Jordanian contacts in the Late Bronze Age, and, with a broader frame of reference, the late Kyriakos Nikolaou from Cyprus on the evidence of Mycenaean [and Cypro-Mycenaean] contacts). Peter Parr, noting that most Western archaeologists and historians approach Jordan in terms of its westward connections, writes on the contacts between Jordan and NW Arabia in the Late Bronze and Iron Ages. There is a whole handful of papers on Iron Age subjects, and a larger handful on Hellenistic, Roman, late Roman or Nabataean subjects. The final twelve papers are all set in the Islamic and recent past, and range over subjects as varied as early Islamic pottery, the archaeology of Pella at the beginning of Islamic times, architecture, medicine and learning, early Islamic religious traditions, representations of the Dome of the Rock in medieval Christian iconography, and two historical discussions, one on the beginning of the Ottoman period, the other on the last years of Ottoman imperial rule.

In the second volume, representing the conference whose theme was 'The Jordanian Environment: Geographical and Historical', there are articles on the climate of Jordan, present and past (Numan Shehadeh, and Abdul-Kader Abed), zoology and wildlife conservation (Nelson), and botany (Dawud el-Eisawi). Three articles are devoted to discussion of the palaeoenvironment (Garrard *et al.*, van Zeist, and Gilbertson *et al.*). Three papers are concerned with the Palaeolithic period (Besançon and Hours, Henry, and Rollefson), but only one with the Neolithic (Kirkbride). Since the publication is intended to act as a shop window and an advertisement for recent and current research in Jordan, it is a little unfortunate that 'Ain Ghazzal, the extensive and exciting aceramic neolithic settlement near Amman, is not put on display. The Chalcolithic period and the Iron Age also fare rather poorly, but there are three papers on Bronze Age subjects (Harlan, Donahue, and McGovern). The subject of Hellenistic and Roman urbanism receives two papers

(Will and de Vries); Ghazi Bisheh considers the re-use of a late Roman castle as a luxurious rural residence in the Ummayyad period. Piccirillo writes about rural settlement in the Byzantine period, and Dentzer contributes on the subject of Nabataean pottery. Sapin attempts to demonstrate the value of an integrated approach to a regional, multi-period survey, combining archaeological and historical data with geological and geomorphological observations. Beaumont contributes to the debate about anthropogenic erosion versus soil erosion by natural forces. Several authors consider the present or the recent past from different points of view: Jones writes from the point of view of the modern geographer mapping inter-regional relationships, and seeks to discover how the present may help us to map the past; Aurenche and Desfarges report their 'ethno-architectural investigation' of the social fabric of a village as expressed in its recent architectural past; Abujaber discusses agriculture, environment and nineteenth century population movement; el-Isa considers Jordan's seismicity and its observable effects on ancient sites; and Ghawanmeh turns to the Mamluke period for his discussion of drought, plague and population decline.

While one may suspect that many of the articles in these volumes will in some ways repeat what their authors have written or plan to write elsewhere, it is undoubtedly very useful to have a reference collection of articles on so many different periods viewed from so many different points of view all together between two pairs of covers. And it is also interesting to note the effect of attendance at the second conference on a number of authors: the study of man and the environment is the most multidisciplinary imaginable, and it will advance through interdisciplinary interaction such as the second conference clearly stimulated. The Jordanian Department of Antiquities may feel confident that the conferences and their publications perform a useful function in promoting interest in their country's history and archaeology. The sales of these volumes to private purchasers may not be great, because of the broad diversity of their contents as against the narrow and specialised interests of most of us (not to mention the constrictions on our purchasing power). However, because of their convenience in bringing together a large number of up-to-date and happily brief discussions of subjects of current research, one may confidently predict

that the usage of library copies will be high.

TREVOR WATKINS

FRITZ, Volkmar and KEMPINSKI, Aharon. *Ergebnisse der Ausgrabungen auf der Hirbet el-Msās (Tel Māsōš) 1972-1975* (Abhandlungen des Deutschen Palästinavereins). 3 vols. Wiesbaden, Harrassowitz, 1983. xvi + 253 pp., 30 figs.; xv + 227 pp., 176 pls.; 30 plans. DM 498.00.

The work is dedicated to the memory of Yohannan Aharoni and described as the first German-Israeli project in the area of Biblical Archaeology: a merging of two different traditions of research. Three joint seasons of excavations were carried out between 1972 and 1975 with an additional rescue season under Kempinski.

Two pages are devoted to methodology and documentation, including rather irrelevant references to national methodologies. This apologia clashes somewhat with the generalised section drawings and the evidence, from the plates, of extraordinarily untidy excavation techniques. However, the detailed descriptions in the next section (Early Iron Age Settlement) make up for much of this. There is a wealth of structural detail and excellent discussion of the architecture throughout. The material is well illustrated and argued, for the most part.

Nevertheless, some arguments are hard to follow. For example, I do not see why stone corbelling should have originated in nomadic or semi-nomadic societies (p.30); nor do I follow the reasoning that because the technique appears 'at the periphery of Middle Bronze Age urban culture in Transjordan', it was introduced into Palestine at the end of the Late Bronze Age and the beginning of Iron Age I from that direction. Surely this building technique is an expediency, in the absence of wood for construction. Similarly, while it is a reasonable assumption that the 'tribes' lived in tents, now and then, as almost everyone has done in

the Middle East, including emperors, this does not mean that they then created an architecture based on this form. Such architectural determinism is out of place in an otherwise scholarly presentation.

A short section deals with Chalcolithic remains, forming a limited but useful addition to the period in the southern regions. Much of the discussion, however, is questionable: for example, the co-existence of the Beersheba culture and northern EBIA. There is no proof of this anywhere in published form.

Section 4 presents a Nestorian monastery which had been variously identified as Roman and Byzantine. The new evidence convincingly suggests that it was in use before the destruction of Khirbet Mafjir in 746, underlining early Muslim religious toleration.

The Middle Bronze Age fortifications (Section 5) are discussed, based on sensible use of air photographs and earth-moving machinery: both excellent strategies, when they are combined with stratigraphic sampling. The section forms a valuable addition to the growing list of MBA fortifications: but much more precision in recording is required. There is the usual confusion of military architectural terms (glacis/rampart); there is also the usual block-diagrammatic approach to major sections. I cannot grasp the significance of the oven in house 806 that makes it so much more important than the structural profiles of the fortifications (pp.190-1).

Various technical analyses are presented in Section 6, including metallurgy, botany, human osteology and marine shells.

Perhaps the most salutary aspect of the book is its essential scholarly honesty in the presentation of evidence and its evaluation. Note, for example, the arguments regarding the date of the MBA fortifications: by Singer (p.188 ff), who wrote the section and the commentary by the joint authors (p.(p.229)).

Fritz and Kempinski end the report with a lucid and balanced summary in Section 7. They conclude that:

1. the first Iron Age settlement belonged to the Israelite tribes;
2. who had prolonged contact, prior to settlement, with Canaanite city states



of the 13th century;

3. they form an amalgamate of sub-tribes into a settled community;
4. and they underwent a change in subsistence economy, now incorporating agriculture and cattle rearing.

The authors also note that these observations '...lassen sich mit keiner der bisher entwickelten Landnahmetheorien in Verbindung bringen' (p.231). This is a breath of fresh air, as is the scholarly discussion of toponymy and sources in section 9 and makes the book a valuable contribution to archaeology and history.

S. W. HELMS

USSISHKIN, David. *The conquest of Lachish by Sennacherib*. Tel Aviv, The Institute of Archaeology of Tel Aviv University, 1982. 135 pp., 101 figs. £35.00.

This book, produced in a lavish 'coffee table' format, is a synthetic study of one of the best documented battles in antiquity. It is divided into three major parts, the first being a discussion of the historical evidence in the Bible and the Assyrian texts. The second is an excellent brief summary of the archaeological evidence from the British excavations of 1932-1938 and the current Israeli excavations, directed by Professor Ussishkin. The third is a detailed discussion of the Lachish reliefs from Nineveh, and an analysis of their depiction of the city and the siege, the results being summarised in a set of excellent reconstruction drawings based on a combination of the evidence from the excavations and the reliefs.

A number of important points may be made concerning both the renewed excavations at Tell ed Duweir and this study of the destruction of Lachish by Sennacherib. The first of these is methodological. The renewed excavations use techniques not fully developed at the time of the British excavations, and are

able to provide a more precise and reliable picture of the stratigraphic sequence and phase plans of the site. This modern strategy is combined with a tactical approach combining both open areas and a deep trench which should yield both the maximum information concerning the site plan in specific periods and a clear picture of the history of occupation on the site. Perhaps the most important point about this use of more modern methods is the fact that while it has added precision and reliability, it has also confirmed the general conclusions of Miss Tufnell, a tribute both to the ability of the original excavators to rise above their own methods, and to her abilities as a scholar. Perhaps the most notable achievement of the renewed excavations so far has been to settle the debate over which level was destroyed by Sennacherib.

An interesting fact to emerge very clearly in the reconstruction drawing of Level IV-III (Fig. 9) is the amount of open space within the walls of the city. It would be particularly interesting to establish the eastern boundary of this area, and, hence, the actual area occupied by dwellings. The limited size of this area in relation to the overall size of the tell must lead us once again to ask whether Lachish (and contemporary sites) functioned as a centre of population, produce-marketing and manufacture for the surrounding countryside, as medieval and modern cities, or merely as a centre of administration and wartime refuge for the surrounding population. We must always be cautious in assuming that the function of the ancient sites was the same as the medieval and early modern cities of the Middle East - Tell en-Nebi Mend, capital of an independent kingdom in antiquity, is no more than a village today, although the entire area of the ancient tell is still occupied.

Ussishkin reports the findings of Risdon (pp.56-57) concerning the morphological similarities between the Egyptian and Judaeans skull series with a proper note of scepticism. No accurate means of determining racial affinity from skeletal material has ever been developed, and such morphological features would today be analysed in terms of environmental effects, due to patterns of nutrition, disease, etc.

The interpretation of the curly-haired men on Segment V of the Assyrian reliefs as 'Hezekiah's men' (p.109) is certainly the most likely one. These may well have been

the permanent staff of the governor's palace who assisted in carrying out the national plan of defiance against the Assyrians, and commanded the defence of the city.

It is particularly significant that Lachish was not rebuilt during the Assyrian ascendancy, and that it was rebuilt as soon as that ascendancy ended. The latter would have been both an act symbolic of renewed independence, effacing the previous defeat, and an act of strategic administrative and military necessity.

In summary, this is an important synthetic study of the evidence concerning the conquest of Lachish by Sennacherib, which, with the continued work of Professor Ussishkin and his team, should lead us to consider other, and larger, problems concerning ancient Lachish.

RUPERT CHAPMAN

AVIGAD, Nahman. *Discovering Jerusalem*. Oxford, Basil Blackwell, 1984. 270 pp., 304 illus. £19.50.

Avigad's book represents a welcome addition to the growing literature on the archaeology of Jerusalem. Written in a relaxed but authoritative style, and bountifully illustrated, it chronicles the discoveries made during some twelve years of almost continuous excavation in the Jewish Quarter of the Old City. Much debate over a considerable period has been concerned with various aspects of the topography and occupational history of the Upper City, and Avigad's excavations were conceived in the hope of coming to grips with at least some of these issues.

The first chapter comes to grips with one of the more contentious issues, namely the date of initial settlement on the Upper City. Avigad claims to have found three distinct phases of Iron Age occupation, dating from the Late Eighth Century to the time of the Babylonian conquest. The first

phase, built directly on bedrock, is a domestic stratum dated towards the end of the Eighth Century. Shortly after this, a monumental stone fortification wall, fully seven metres thick and exposed to a length of sixty-five metres, was constructed along a rough east-west line. Avigad suggests that this is the northern line of an Israelite city wall built on the approximate line of the later Hasmonean circuit. Slightly to the north of this a further, although much more fragmentary, fortification system was discovered. This included fragments of walling, an external tower and what are suggested as fragments of a four chambered gateway. This last system, said to be quite separate from the earlier, so-called 'Broad Wall', was constructed some time in the Seventh Century, and destroyed in the Babylonian sack of 586 BC. These very impressive, and somewhat unexpected finds go a long way towards resolving outstanding topographic problems. Settlement in the Upper City began some time during the Eighth Century, and shortly thereafter, at least some part of the Upper City was walled, and destroyed during the Babylonian sack. But there are problems. It seems unlikely that the Broad Wall system, if given the full Hasmonean extent advocated by Avigad and Geva, can be seen as '...an emergency measure adopted in the face of approaching danger' (p.55), making its attribution to Hezekiah somewhat doubtful. Equally doubtful is the observation that the later northern system was completely separate from the Broad Wall. As Avigad notes, this system effectively straightens out the curious 'kink' in the Broad Wall, and it would seem far more likely that the later structures represent a rebuilding of the Broad Wall, to strengthen what must have been recognised as a vulnerable point in the defences. It would also explain the lack of any destruction debris on and about the Broad Wall. Whatever the events, the two major discoveries, those of Iron Age settlement and fortifications, resolve the question of Upper City occupation in favour of the maximalists, finally laying to rest a very long-standing controversy.

The period between the Babylonian sack and the Hasmonean Renaissance appears to have been one of recession in the Upper City, for Avigad reports little of interest from this period. Hasmonean remains are also fairly sparse, and barring some scraps the northern line of the so-called First Wall and fragments of what may be a gateway (the Gennath?) in it, little of importance was discovered. Failure to find any trace of either of the



much sought after Akra, the Seleucid citadel, the the Hasmonean Palace were disappointments keenly felt after earlier successes. However, the quality and quantity of finds datable to the Herodian period more than make up for this. Much of the third chapter, itself bulking almost half the text, is given over to the description of the rich finds from Herod's city. Whilst no monumental or official structures were revealed, much domestic material from several rich residences was brought to light. Chief among these were the 'Herodian Residence', a fairly large house dating to the time of Herod, containing much domestic furniture and household ceramics; the 'Palatial Residence', a magnificent mansion, over six hundred square metres in extent, which still possessed enough fragments of skilled mosaics, striking wall paintings and ceramic, stone and glass remains to allow Avigad to reconstruct the major features of this residence with some confidence; and the 'Burnt House', another fair sized structure destroyed in Titus' sack, containing much domestic furniture, household goods and utensils. This last, because it was so thoroughly destroyed, preserved sufficient material for an even more thoroughgoing reconstruction than that of the Palatial Mansion. A full description of the contents of these three residences, followed by detailed consideration of the importance of the various arts and crafts, allow us to gain a well nigh unparalleled view of the lifestyle of a most privileged sector of the Herodian state. Avigad's analysis is finely considered and the many illustrations and reconstructions of various aspects of the sumptuous remains complement the text to great advantage. There is little to quibble with, although such things as the evolution and sequence of Pompeian wall painting styles and the technical aspects of glass making are best left to experts, as here the exposition is less certain. However, the overall picture gleaned from his analyses is one of prosperity, luxury and artistic eclecticism, and our understanding of the Herodian period in the Upper City is immeasurably enriched.

The area of the Jewish Quarter seems to have been little involved in the much truncated Roman city of Aelia Capitolina, and it is only with the onset of the Byzantine period that any large scale activity returns. Once again Avigad's discoveries are important, and resolve several longstanding topographic problems. The first of two major discoveries was the location and excavation of almost one hundred and eighty metres of the

southern stretch of the main north-south thoroughfare, the Jardo Maximus. Long known from the Madaba Map, the final discovery and convincing reconstruction of this much sought after landmark represents a significant advance in our knowledge of Byzantine Jerusalem. The date of this stretch of the Cardo proved to be Sixth Century, and Avigad attributes the construction to Justinian, with some reason. The second discovery, perhaps even more exciting, was the location and partial excavation of the famous Nea Church, and the full excavation of a huge cistern associated with it. This last, involving much shifting of overburden, was rewarded with the discovery of a monumental inscription, perfectly preserved, which allowed the complex to be attributed to Justinian, and closely dated in the bargain. The discovery of these two great landmarks provided us with valuable evidence of the much vaunted Justinianic building programme in one of its major foci, and resolves two long-standing topographic problems at one fell swoop. Again the reporting is clear and concise, and the discoveries well illustrated.

The final chapter lists in a rather abbreviated form those discoveries to be dated after the Arab Conquest. For much of the period this part of the Upper City seems to have been peripheral to major activities. Nonetheless, fragments of what may prove to be the shadowy church of St Peter ad Vincula were located hard by the Nea Church, and scraps of the Crusader and Ayyubid city wall are of importance, as is the tentative location of the early Zion Gate, one hundred and twenty metres to the east of its familiar successor. This last section is shorter than might be desired, and one could wish for a little of the detailed description and the plethora of photographs that accompany most other offerings.

The text is beautifully written, in a way that informs and excites without falling into the scholarly impenetrability of many offerings of this type. The book is lavishly fitted out with well chosen attractive illustrations, many in full colour, that complement the text without detracting from it. Of value to scholars and students, it will provide great illumination to anyone interested in the material past of one of the world's great cities.

S. J. BOURKE

TUFNELL, Olga. *Studies on scarab seals*.  
Vol. 2. *Scarab seals and their contribution to history in the early second millennium BC*. 2 parts. Warminster, Aris & Phillips, 1984. xv + 397 pp., 30 figs., 64 pls., 34 tables. £35.00.

This must surely be the most detailed study of the scarab yet to appear in print. Arising out of a problem connected with a cache found at Byblos in 1922 and known today as the Montet Jar, the investigation grew to one of gigantic proportions as the list of scholars in the acknowledgements shows. The author's other avowed purpose was to continue the comprehensive treatment of the history of the scarab begun by Ward in the first volume of this series, reviewed elsewhere in an earlier number of the *Bulletin*.

Ward had already shown that the collection contained in the cache at Byblos represented the fourth and last stage of scarab development observable during what is termed in Egyptian archaeological and historical terminology the First Intermediate Period, ie. just prior to the Middle Kingdom. The author thus sought to relate this most important deposit to Middle Kingdom scarab design. There are thus four main purposes for this study: firstly, to establish links with material already presented in Volume 1 of the series; secondly, to set up a typological sequence of Middle Bronze Age scarabs found in Syro-Palestinian contexts based on pottery development; thirdly, to relate the sequence to the series from Egypt covering kings of the Twelfth to early Eighteenth dynasties; and finally, to establish a system whereby stratified deposits or tomb contents with sufficient design scarabs can be related to Egyptian kings' reigns.

The Montet Jar with which this analysis begins is a coil-built, flat based vessel of typical Early Bronze Age style, its scarab contents being here dated as stated above to the late FIP and early Twelfth Dynasty or c.2050-1975 BC.

Chapter One is devoted to an examination of many sites yielding comparable scarab material, Ruweise near Sidon, Megiddo burials and Jericho cemeteries, Kahun town with the tomb of Maket, Uronarti fort seal impressions, Tell Fara (South) cemeteries and lastly Tell el-Ajjul. The dating for King Amenhotep I given on p.19, ie. c.1575-50 BC, seems rather

high, most chronologies now putting his reign at c.1545-20 BC, which in any case accords with the dating of the Second Intermediate Period to c.1786-1567 BC given in the preface.

In the second chapter the analysis is based on such factors as dimensions; design classes, 12 with many sub-divisions; head types, 9 classes with up to 4 divisions each; backs, 9 types; sides, 26 forms; as well as a breakdown of materials which range from amethyst and carnelian to steatite and paste. While such a wealth of detail is most valuable for classification, it also tends to lead to speculative abstractions, and once again the reader should be warned against mere typological dating. Provided there is stratified site and other archaeological evidence this sort of thing is valid, but too often in the past scarabs from not always clearly dated tombs or else simply without a provenance have been used to form dating material, with mere decorative features such as spirals or different border patterns used as criteria. A chronological summary is given here with minute details after the presentation of the evidence, and the reader must use it for individual sites himself in order to see whether or not this system works.

Chapter Three deals in the main with scarabs excavated from sites in Syria and Palestine with again extensive classification and drawings of many examples. Included also are examples of pottery from a Jericho tomb for cross-dating, a useful adjunct. Similar helpful parallels are those such as that on page 66 where an unpublished scarab from Tell el-Dab'a in the Egyptian delta is matched with no. 1702 from tomb G.46 at Jericho for crosschecking. Especially important may be no. 1300 from tomb B3, late phase cited on p.69, which could embody the prenomen of the Thirteenth Dynasty pharaoh Khaneferre Sebekhotep IV, which should prove valuable for future chronological reference. Lesser known kings such as these are also unlikely to have had their names used on later scarabs by copyists as is the case with say Senusret I or Thutmose III.

The fourth chapter is concerned with scarabs from Egypt itself, viz. Kahun town and Uronarti fort. On page 85 the writer rightly stressed the fact of the decline of Kahun after the Twelfth Dynasty, its need having mainly gone, as the cause of the paucity of certain scarab types there. Scarabs in the Maket tomb at Kahun dated to Thutmose I and II c.1520-1504 BC are also



compared with those of the Hyksos king Auserre found at Ajjul.

There is a discussion of design classes in chapter five covering such items as linear patterns like the maze, geometric, human figures, etc. Hieroglyphic monograms play a great part in these, which number ten in all. Names and titles are of course important and the evidence is gathered under class 11. The significance of the named scarabs found abroad is discussed here briefly by G. T. Martin.

Finally chapter six deals with Royal-Name scarabs such as the Senusret I amethyst example from Bethshan (no. 3029). Once again extensive tabulation is used to show the sequence and distribution of types and designs associated with individual reigns. The last chapter is simply concerned with summaries and conclusions. It is here suggested that four main centres of craftsmen produced scarabs 'perhaps influenced by certain species of beetle common in the districts in which the industry functioned'. This is by far the most significant conclusion reached and the suggestion is of such major moment that one could wish the idea had been expanded on and the reader given more information as to how and why this was arrived at. As it is it leaves the question of where these centres were open. Considerable changes in size and design are noted in addition during the reign of Senusret III 1878-1843 BC as well as others that took place down to the end of the reign of Thutmose III.

In conclusion as regards the layout of the work, it has an index and very adequate footnotes and references, but no bibliography. It will form a valuable addition to scarab literature as it contains a mass of material, some of which has not been available previously to the Egyptologist, as well as some very important correlations and deductions, but it must in fairness be remarked that the presentation is poor, making it difficult for the reader to use at times.

E. P. UPHILL

WRIGHT, G. R. H. *Ancient building in south Syria and Palestine*, Vol. I (text), Vol. II (illustrations) *Handbuch der Orientalistik*, 7. Abteilung, Kunst und Archäologie, J. E. van Lohuizen-de Leuw [ed.]: I. Band, Der Alte Vordere Orient, 2. Abschnitt, Die Denkmäler, B. Hrouda [ed.], B- Vorderasien, Lieferung 3). Leiden-Köln, Brill, 1985. 2 vols. xxiii + 539 pp.; xv + 367 pls. Glds. 420.00.

This is a curious book, reflecting a passionate personal approach to scholarship, the key to which is perhaps best expressed in the author's introduction. There, side by side with exemplary clarity in stating the problems inherent in defining a Syro-Palestinian architecture, the reader is confronted with a cavalier treatise on scholarly notation which, as Wright says of his own work, 'may well be reckoned a generation or more out of date'.

The avowed purpose of the book is 'to provide a ready reference to...information hitherto extremely inconvenient to locate and consult' (p.3) and therein perhaps lies the core of criticism. The information is there, to be sure - Wright has read and cited, somehow, nearly all of the sources - but it is no more readily accessible than it was before. Perhaps less so, being at times totally submerged in confounding erudition.

In this sense then the two volumes are hardly a reference work for students new to the subject: it would confuse and, worse, mislead them, if it did not frustrate them first. As a reference work it would have been better to limit the presentation to architecture, perhaps in its broadest sense, in order to produce, precisely, a technical compendium, with better illustrations, rather than to confuse 'science' with spurious historiography. An alphabetically listed bibliography, at the very least, would have been expected, rather than the illogical and annoying dispersal of references, inconsistently noted here and there in the text.

Throughout the work, odd expression apart, there are some astonishing declarations and far too many exclamation marks. One is assaulted by such phrases as 'wild man' (p.13), the 'Eclipse of the City State in c.1200 BC', Jerusalem as an 'imperial' city (p.59) and, to name but one other, in

the essentially balanced summary (p.514 ff) the extraordinary notion that Palestinian architecture could somehow have been a formative influence on classical building. Such strange visions are laced with tautologous use of foreign words: for example, we do not need to be told that 'archaeological literature' is *Baugeschichte* (*sic*), nor that *Raum* is 'room', even if this implies appropriate respect for the great German tradition of architectural history in the ancient world.

Still, unfortunately, on the negative side, one must note that Wright's treatment of chronology suffers from unaccountable carelessness. Note, among others, that the Chalcolithic period seems to end in about 3000 BC (throughout), MBIIa begins in 1800 BC (p.43) but compare MBIIA = 1750-1600 BC (p.44) while a few pages later MBIIb = c.1750 BC and MBIIb-c = c.1700 BC. Similarly, there is much confusion of terms (perhaps justifiably: but this should have been discussed), such as Late Chalcolithic-EB and Proto Urban.

Finally, and still negatively, one might find it personally gratifying to be featured as an imaginative fabricator, though of classical learning (p.187); but such remarks are totally out of place. They add nothing. In the same way I cannot understand the author's uneven objectivity regarding various excavations. He seems to be head over heels in love with some while vacillating between love and hate where others are concerned. It might have been better to leave sites such as Jawa out of the volumes altogether since so much hangs on its date which Wright seems not to believe. Or does he?

And yet, in the end, there is much to recommend this monumental labour, perhaps strange and curious because it stems from both love and hate. It is a vast collection of sources, technical information and, when it remains technical, sound criticism and interpretation. The various sections on fortifications, temples - especially Wright's very proper admonitions - and the more detailed structural chapters can be consulted with positive results. The drawings, though sadly not up to the quality expected of the author, are informative and the careful correlation of text and illustrations (through outdated but, here, appropriate use of marginal notes) combine effectively.

Wright was pushed for time and, one suspects, space in which to express his undoubted

and proven broad experience of Syro-Palestinian architecture and this is a pity because much of value and originality will, I fear, be lost.

S. W. HELMS

DALLEY, Stephanie. *Mari and Karana: Two Old Babylonian Cities*. London, Longman, 1984. 218 pp., 69 in-text figs. £12.50.

This is an unusual type of book, of which many more examples are needed, for it is aimed at the synthesis, interpretation and popularisation of a subject which should be of interest to many, but which is difficult of access in the standard published form. Dr Stephanie Dalley, a professional Assyriologist, writes simply and vividly for the generalist audience about two Mesopotamian cities of the second millennium BC, drawing on her detailed knowledge of their copious archives of clay tablets, and illustrating by direct quotations the many aspects of life in these politically and economically sophisticated city-states on which the tablets bear.

Dr Dalley selects from the 20,000 tablets found in the great palace at Mari, situated on the Euphrates in Syria a little downstream from the confluence of the Khabur and close to the frontier with Iraq, and from the 200 tablets found during the excavations at Tell Rimah in Iraq, excavations in which she herself participated, as she has in the publication of the tablets. The quotations are deftly woven into the text to shed clear light on the way these urban societies of almost four thousand years ago functioned, and on what they found important, necessary, trying or troublesome enough to record in writing. Tell Rimah, ancient Karana in all probability, was not a city of the first rank, whether in size or political importance; the site lies on the N fringe of the semi-arid steppe about 110 km W of modern Mosul in N Iraq. Mari, on the other hand, whose identity is quite sure, was a city-state of the first water, both politically and economically, commanding the middle stretch of the



Euphrates. The two sites therefore represent a useful contrast to each other.

It would be interesting enough if we were to have twin shafts of light cast on the lives of people in two city-states of different scale, but of course the archives of these two palaces belong to a period which is extraordinary in its general level of surviving textual documentation and extraordinarily interesting in the new era of international power politics and diplomacy which had dawned in Mesopotamia. This is precisely the period when the representative of a previously insignificant dynasty at a small place called Babylon in S Mesopotamia, a king called Hammurabi, in the space of one long reign brought the whole of Sumer and Akkad under his power and effectively invented Babylonian. At exactly the same time a new power had emerged in the NE of Mesopotamia, and an equally large-scale figure, Shamshi-Adad, brought the city of Ashur and the state of Assyria to the centre-stage of history for the first time.

In these momentous times Karana's kings at first lived well within the orbit of Assyria's power, but by a fortunate coincidence for us the fragment of the Karana archives which has been excavated belongs to the very time when the power of Babylon was being exerted even in N Mesopotamia, and its king acknowledged his changing circumstances by adding 'servant of Hammurabi' after his name and title. Mari lay a long way from both Babylon and Ashur, but its economic importance and power made it a highly desirable plum; Mari's powerful native dynasty was ousted by the Assyrian king, who placed his own son on its throne, and then, when a 'young pretender' had returned to Mari at the recession of Assyrian control, he in turn was forced to yield to the great-power status of Babylon. So the whole stage on which the kingdoms of Mari and Karana were players is generally well-lit and populated with a cast of larger-than-life characters.

The rich archives of documents, however, are by no means confined to concerns with the political and diplomatic events of the day and the conduct of warfare. Dr Dalley spends the greater part of her book illustrating how the palace communities operated as households with important commercial, industrial and economic roles; the food and drink of the times, from the basic and staple to the recent discovery of cloves from Indonesia at one site near Mari, the royal taste for truffles, and

the existence of ice-houses; the important light shed by the archives on the role and position of women in N Mesopotamian society; the underpinning of every aspect of life in religious beliefs and practices. The basis of the unfolding of all these aspects is the texts themselves, but Dr Dalley loses no opportunity to cross-refer the textual reference to the artefacts or the architecture recovered in the same excavations as the texts. And the whole is made more lively by Dr Dalley's personal acquaintance with the land and people of Syria and Iraq, and more vibrant by her deep and knowledgeable enthusiasm.

As Dr Dalley reminds us, this world of N Mesopotamia may at first seem far away in time and space, but as we read we find so much that causes wry nods of familiarity with our own world. And, more than that, we should be aware that this very ancient world was seeing the first contacts with the just developing palace civilisation of Minoan Crete; in later centuries the Aegean and wider Mediterranean world (and thus, ultimately, our world) were to inherit a great deal from the urban and already very ancient Near East. Stephanie Dalley has done a good service in providing the ordinary reader and the non-specialist scholar with an easy, colourful and informative means of access to that world.

TREVOR WATKINS

JASIM, Sabah Abboud. *The Ubaid period in Iraq. Recent excavations in the Hamrin region* (BAR Int. Ser. 267, parts i and ii). Oxford, British Archaeological Reports, 1985. Part i: 247 pp.; Part ii: 279 pp., 19 pls. £25.00 each.

An international rescue operation in the Jebel Hamrin valley of East-Central Iraq, mounted by the Iraqi State Organisation for Antiquities in the 1970s, produced a mass of new archaeological information. As a result, this fertile region, through which run two major trade routes between north and south

and between east and west, is now one of the most fully documented in the region. This vital new information is only slowly becoming available to scholars, often in the form of preliminary reports. A book like the one under review which presents a detailed excavation report, coupled with a digest from the other sites of the same period and which also sets that evidence in its wider context, is most welcome and sets an example which it is to be hoped others will soon follow.

The author begins by briefly describing the physical background, with short sections on the geology, climate, vegetation and population, setting the scene for the detailed description of his excavations at the important Ubaid site of Tell Abada at the eastern end of the valley. He begins by describing the architecture from each of the three levels, perhaps the most impressive from any of the Ubaid sites in the Hamrin, with its splendid T-shaped halls in levels I/II. Abada is the only site of the period to have been fully excavated so that uniquely we are able to study the complete plan of a prosperous village, which even had 'public works' in the shape of a piped water supply. In level II the village has what the excavator describes as a multi-purpose building housing a granary and animal pens. By contrast, in level I, the top level, there is evidence for granaries, constructed of mats in three of the individual houses. There are also pottery workshops with sophisticated two-storey kilns and evidence of stone and flint working. The buildings of level III, the lowest level, are much less elaborate and are separated by sterile soil from level II, although no sections are included to demonstrate this. It would also have been interesting to have had a locational analysis of the small finds to see whether any identification of room function is possible. For example, it is said that the collection of clay tokens came mainly from Building A, giving rise to the suggestion that this building had an administrative function; a study of the exact find spots might have been instructive.

The three building levels are said to be close together in time and on the evidence of the pottery level III is dated to Ubaid I/early Ubaid II. It produced pottery originally said to be classic Samarra, but now reclassified as Choga Mami Transitional, and Ubaid I/II wares. The status of this 'Samarra' ware is still somewhat uncertain. Levels I/II produced Ubaid II/III wares and a certain number of Halaf sherds providing

further well stratified evidence for the partial overlap of these periods. The site was apparently deserted by Ubaid IV. The rich and varied collection of painted pottery is meticulously described and classified and amply illustrated. The interesting collection of impressed and incised wares is slightly less fully dealt with, though its affinities with Dalma ware are discussed in some detail. Some sherds of string-impressed ware of a distinctive type (Fig. 213d, e, f) can be paralleled at Gawra and in the Institute's own collection from Arpachiyah. The small finds are also described in some detail and two short appendices include reports on the animal bones and the flints.

Chapter IV presents a useful digest of the evidence from the other Ubaid sites in the Hamrin and notes that the pottery from Tell Songor A identified by the excavator as Samarra, has been reclassified by Dr Oates as Choga Mami Transitional. The internal chronology of the sixteen sites and their foreign relations are dealt with together with a discussion of the relationship between the domestic architecture of Ubaid II/III and the classic Uruk temple plans of Eanna IV. In Chapters V and VI Jasim attempts to reconstruct a picture of Ubaid society using site catchment analysis, a study of site hierarchies and ethnographic evidence. His conclusions are largely convincing, though to classify Abada as a 'major administrative centre' perhaps reflects the partiality of the excavator for his own site! To call it the most important site in the region ignores the fact that none of the other contemporary sites has been excavated in its entirety. Who knows what might lie under the unexcavated portions of Kheit Qasim for example?

Dr Sabah Abboud Jasim has produced an extremely useful and important volume and it is very much to be hoped that other similar volumes dealing with the later periods in the Hamrin will follow as soon as possible.

HARRIET CRAWFORD



BEAZLEY, Elizabeth and HARVERSON, Michael.  
*Living with the desert: working buildings of the Iranian plateau.* Warminster, Aris & Phillips, 1982. xix + 119 pp., 143 pls. £20.00.

KING, Philip J. *American Archaeology in the Mideast: A history of the American Schools of Oriental Research.* Philadelphia, The American Schools of Oriental Research, 1983. xvi + 291 pp., 56 pls., 1 map. US\$15.00.

This survey of vernacular architecture in the Iranian Plateau is a well-documented and copiously illustrated guide to architectural adaptations in an arid climate. An introductory chapter on environment is followed by chapters on building materials, water catchment and storage, ice houses, watermills, windmills and pigeon towers, as well as a chapter by Susan Roaf on wind catchers. The authors show that local builders have been able to incorporate environmental constraints as elements of effective building design and show that appropriate technology can be aesthetically impressive as well as energy-efficient.

There are many fascinating details on the use of wind and water in ice making and grain milling, on millstone operation and maintenance, and the role of pigeon towers in producing melons and gunpowder. The social and economic functions of flat roofs are noted as well as their thermal properties. Shortage of timber sometimes makes vaulting necessary, and the authors note that domes lose heat in winter, without commenting on the contradictory observation of Stead in *Housing in Arid Lands* (1980) that beehive domes in N Syria are warmed in winter by the greater surface available to absorb sunlight. Given the authors' interest in microclimatic adaptations, it is regrettable that they neglected to test the energy collecting efficiency of their buildings quantitatively or study the overall energy efficiency of villages and neighbourhoods along the lines suggested by Knowles' classic *Energy and Form*. However, Susan Roaf's chapter includes invaluable closely observed detail on how houses work for the 'sedentary nomads' who migrate between different parts of the house at different seasons and times of day.

Few books are as consistently enjoyable and informative. Publication of the authors' reluctantly omitted discussions of bazaars, baths, houses and caravanserais should be strongly encouraged.

ROBERT MILLER

In his preface the author states that 'This work does not pretend to be a social and intellectual history, but it lays the foundations for that larger objective' (p.x). It seems a pity that the intellectual history could not be included; after all, Willey and Sabloff managed to record the history of the archaeology of two continents, including the intellectual history, in a book of this size. However, within the limits set by, or perhaps for, the author, this book admirably fulfils its purpose.

The treatment of the history is chronological, beginning with a chapter on the nineteenth century background to the foundation of ASOR. This includes sections on the great early scholar-explorer Edward Robinson (pp.1-5), and on the various precedent organisations. One important section in this chapter is his discussion of the work of Wellhausen, who 'assumed a development in the religion of ancient people from primitive forms' (p.13). It seems a pity that he does not point out that Wellhausen was merely expressing in Biblical scholarship the contemporary dominance of Spencerian evolutionism. Until recently only a handful of scholars (Petrie, Albright, De Vaux, Kenyon) have risen above the limited vision of Levantine scholarship as a debate between Levantine archaeology and Biblical/textual studies to include developments in general archaeology and the wider intellectual world. Another important section describes the work of Sir Flinders Petrie, and the establishment of the first paradigm (Kuhn, 1970) in Levantine archaeology (pp.17-20). Chapter II covers the period from the foundation of the Jerusalem School in 1900 to 1918 and the end of Turkish rule, chapters III and IV cover the period between the two world wars, during which the archaeological sequence in Palestine and the Levant was established, largely through the work of W. F. Albright. Chapter V covers the first decade after the war, and chapter VI covers the period 1956-1967. Chapters VII-XI cover the period from 1967-1980. Perhaps the most interesting part of these chapters is the outline of the debate over the use of the term 'Biblical Archaeo-

logy' (pp.269-271), and the effect which the 'New Archaeology' is beginning to have in Levantine archaeology (pp.271-272). This amounts to the first new paradigm in Levantine and general archaeology since Petrie.

If I have any one criticism of this book, it is that it is too gentle; for example, in his lenient treatment of Macalister (pp.23, 168), and his repeated references to the Reisner-Fisher excavation techniques, praise of Fisher for his continuation of the use of Reisner's methods after the latter's return to Egypt, and the great improvement in field techniques to which this led. He even goes so far as to say (p.93) that 'In many ways the Reisner-Fisher system anticipated the fundamentals of the Wheeler-Kenyon method, although Kenyon did not acknowledge the fact' and 'The Wheeler-Kenyon method is often contrasted with the Reisner-Fisher technique; in fact, they are more similar than dissimilar, the latter system anticipating the former by two decades. While the procedure of each is basically the same, the Wheeler-Kenyon method permits greater precision' (p.127). What he does not mention is the fact that, as G. E. Wright demonstrated many years ago (Wright, 1969: 125-129), Fisher did not continue to use the scientific techniques pioneered by Reisner, but substituted a less sophisticated, proto-scientific, theory and practice. In fact, it would be more accurate to speak of the Fisher system, as opposed to the Reisner-Wheeler-Kenyon system, although I would prefer the terms proto-scientific and scientific. The result is that at every site on which Fisher either excavated or set up the excavation techniques and recording system (Beth-shan, Megiddo, Tell en-Nasbeh, Beth Shemesh) there are still severe problems in sorting out the stratigraphy, indeed, it may well be said that, in spite of his experience of working with Reisner, Fisher set field technique in Levantine archaeology back fifty years. Only Albright, with his unrivalled grasp of ceramic taxonomy, and the excavators of Tell ed-Duweir appear to have been able to rise above the deleterious effects of Fisher's field techniques.

It is clear from several of his statements (pp.127, 135 and footnote 27) that King shares the misconception that the essence of the scientific system lies in the use of narrow trenches, five metre squares, and standing baulks. That this was not necessarily true even before the invention of the single unit plan (Harris, 1979: 73-80) and the Harris Matrix (Harris, 1979: 86-91, 116-

121), has now been amply demonstrated (Barker, 1977: 15-26, 77-83; Chapman, 1986: 20). King also refers to the Jericho excavations as having been carried out within the grid of five metre squares recommended by Wheeler (p. 127), a statement which is certainly not borne out by the photographs of the excavations in progress, or by the testimony of those who participated in them.

The gentle criticism mentioned above is undoubtedly influenced both by the nature of the author and by the fact that he is commenting on the lives and works of a large group of people, living and dead, among whom he has many friends and acquaintances, and once again constitutes a powerful argument for the selection of an external author for such a work. Nevertheless, Professor King has produced a lively, informative, and interesting book, which is a valuable addition to the literature.

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RUPERT CHAPMAN



RAISMAN, V. and MARTIN, G. T. *Canopic equipment in the Petrie Museum*. Warminster, Aris & Phillips, 1984. 39 pp., 21 pls. £7.95.

It is curious that the publication of museum catalogues tends to lag far behind that of theoretical works, when research is constantly frustrated by lack of data. In the case of the Petrie Museum of Egyptian Archaeology this is gradually being rectified, and a new volume in the series of catalogues published by Aris & Phillips is most welcome. The collection of canopic jars is a fairly modest one of sixty pieces, and the authors have wisely refrained from turning this inventory into a developmental study, although a simple definition might have been helpful to the general reader. (Canopic jars are sets of four containers for the viscera of the mummy, the stoppers representing the heads of four guardian deities.) The examples, over a third of which have not previously been published, range in date from the Old Kingdom to the Late Period with the majority belonging to the New Kingdom. Each piece is described and illustrated, most of them photographically, with line drawings of the inscriptions. Concordances and indexes include museum registration numbers, references in Petrie, *Funeral Furniture*, and personal names and titles, the last two categories being of particular value in the assembly of tomb groups. Companion pieces in other collections are in fact cited.

H. M. STEWART

the construction of one particular pyramid, that of Sesostriis II at El-Lahun. The emphasis is on the material and social culture of the workers and their families, and for much of the book the activity of pyramid-building seems almost incidental. Indeed, the inclusion of a lengthy section on gynaecological problems from a medical papyrus stretches the scope of the main title rather incongruously.

In the admirably succinct introductory chapters comparisons are made with other single-purpose working communities such as those at Deir el-Medina and El-Amarna, where circumstances permitted town-planning uncomplicated by random development. The present settlement, partly excavated by Petrie, consisted of single-storied, flat-roofed houses of normal domestic pattern, but set continuously side by side and back to back, the smallest having upward of four rooms, and the largest encompassing separate quarters for harem, servants, kitchen, etc., each having its own central court. These mansions, although belonging to senior officials, were also contiguous.

A significant number of Asiatic personal names appeared in documents from the site. Much pottery of Aegean and Syrian type was also found, but whether this came directly or was made in Egypt by foreign craftsmen is uncertain. Of particular interest in this respect are the technical reports on processes by which the composition of pottery and metals may be analysed with a view to identifying their places of origin. Unfortunately, the results on the present material are only tentative. The book is based on a reconsideration at Manchester Museum of finds from Petrie's excavations at 'Kahun' in 1889-90, and is a welcome addition to the literature.

H. M. STEWART

DAVID, A. R. *The Pyramid Builders of Ancient Egypt: a Modern Investigation of Pharaoh's Workforce*. London, Boston and Henley, Routledge & Kegan Paul, 1986. x + 269 pp., 32 pls., 12 figs. £16.95.

While its title suggests a rather weighty economic treatise on pyramid-building in general, this is in fact an excellent popular account of a community which was assembled for

BAINES, J. *Fecundity figures: Egyptian personification and the iconology of a genre*. Warminster, Aris & Phillips, 1985. viii + 446 pp., 199 figs. £32.00.

The fecundity figures in question are those usually referred to in Egyptological literature as 'Nile gods', the author having abandoned the latter term because the figures normally relate in a more general sense to the fertility of the land rather than to the Nile exclusively. The distinction, although valid, is perhaps a trifle over-subtle, since the two were so closely related. Whether such differences are real depends very much on whether the Egyptians themselves would have understood them. As the author acknowledges in his concluding paragraph, 'The strategy of this work is thus to search for distinctions that would have had an explicit, conscious existence, either for the creators of works of art or for their public. It is, however, impossible to prove that the distinctions I have proposed had such a status. The most that can be achieved would be a consensus that they interpret the material meaningfully, whether Egyptians did it in this way or not'.

Occasionally the need to categorise may lead the researcher into difficulties which are of his own making. Several pages are devoted to the vexed question of whether fecundity figures were androgynous because, although male and bearded, they were typically represented with symbolic female breasts. This is surely on a par with considering whether animal-headed gods were genetic oddities. The kind of 'scissors-and-paste' symbolism involved here is on a much more primitive level than the philosophical concepts which the author invokes.

The work is in two parts, the first dealing in general terms with personification in Egyptian religion, and the second with the fecundity figures in particular. The former seeks to establish definitions and terms of reference for the main thesis. This is a difficult task in which logic tends to be frustrated by the material, which is inherently untidy. The second and major portion surveys the documentary evidence with a wealth of examples from the early dynasties to the Graeco-Roman period. Iconography, functions and contexts are discussed, the use of the figures having perhaps been originally

in the motif of the Union of the Two Lands, and subsequently extended to offering-bearers elsewhere. The contexts were predominantly royal and in temple reliefs; funerary uses were rare.

The book is provided with an extensive bibliography and classified indexes, and is a model of how a relatively simple theme may be developed on different levels. My only regret concerns the author's rather numbing literary style, of which a sample has been quoted above.

H. M. STEWART

DROWER, M. S. *Flinders Petrie: a life in archaeology*. London, Gollancz, 1985. xxii + 500 pp., 118 pls. (36 in colour), 8 figs. £25.00.

The surprising thing about this biography of Petrie is that, apart from summary accounts elsewhere, it is the only one. The author, formerly lecturer in Ancient History at University College London, where Petrie himself taught, is ideally qualified for the task, having studied and excavated with Petrie, and having been acquainted with his family and many of the other figures named.

Important as authenticity may be, the ultimate test of a biography is whether it is readable, and in this respect few will be disappointed. I imagine that some readers will skim through the preliminaries about Petrie's ancestry, boyhood and courtship as matters for devotees, and hasten to the events in which he played a significant role, for it is the social and scientific climate, the archaeological theories and experiments, the partisan machinations and personal rivalries which are the prime fascination of the book. For the general public it has perhaps been left rather late, but readers of this *Bulletin* will not need to be reminded of Petrie's outstanding contribution to scientific archaeology.

That he was also an ardent campaigner on



behalf of various political and other causes may be less well known. As a reviewer I am concerned with the merits of the book rather than with those of Petrie's arguments. However, it is worth noting a certain irony in the fact that the biography of this 'shockingly élitist', ultra-right propagandist is published - perhaps with admonitory intent - by Victor Gollancz. Despite the popular image of Petrie as a 'character', anecdote is kept firmly in check, and the account is notable for a well-judged and scholarly evaluation of his work.

H. M. STEWART

of Seti I added to by Ramesses II. It is the second aspect (b) and the scale and number of the re-used items which chiefly engage the author here, some of the fragments having belonged to colossi as large as those at Abu Simbel, and the estimated total complex being of the scale of Karnak. The main object is to present a detailed inventory of the material which can be attributed to Ramesses II, and then to consider it analytically with a view to reconstructing the general layout of the royal residence and the nature of the cults served by its temples. Much of this is necessarily speculative, but it is a worthwhile exercise, providing useful pointers to where further archaeological excavation might be profitable.

H. M. STEWART

UPHILL, E. P. *The temples of Per Ramesses*. Warminster, Aris & Phillips, 1984. xiii + 254 pp., frontispiece and 21 pls. £20.00.

The temples in question belonged to the royal residence called Per Ramesses, which Ramesses II established in the Nile Delta. There are two main difficulties in discussing these monuments: (a) the exact location and identification of the residence have long been disputed, and (b) no temple foundations of Ramesses II have been discovered on any of the sites considered, although elements bearing his name have been found re-used in several places in the Delta, notably Tanis and Bubastis. Appearances suggest that after the abandonment of Per Ramesses in favour of these two towns by kings of Dynasties XXI and XXII respectively its temples and other monuments were dismantled by them and employed as quarries for their own buildings. Such a procedure was not uncommon; several blocks used by Ramesses himself bore the names of pharaohs of the Old and Middle Kingdoms.

The location of Per Ramesses, the first problem (a) mentioned above, is touched on only briefly in the present work, the reader being referred to the fuller discussion by Uphill in the *Journal of Near Eastern Studies* 27 (1968): 291 ff and 28 (1969): 15 ff, where he with many (probably most) modern scholars favours Qantir, the site of an earlier palace

MARTIN, Geoffrey Thorndike. *Scarabs, cylinders and other ancient Egyptian seals: a checklist of publications*. Warminster, Aris & Phillips, 1985. viii + 61 pp. £12.00.

To keep pace with the ever increasing literature on this subject the writer has compiled a handy bibliography here classified under fifteen subject divisions. Entries are arranged alphabetically and number 685 plus a few addenda. A very full list of abbreviations and cited journals included here makes for convenient reference. A must for those interested in the subject of Egyptian seals and sealings.

E. P. UPHILL

STEWART, H. M. *Mummy cases and inscribed funerary cones in the Petrie collection*. Warminster, Aris & Phillips, 1986. ix + 84 pp., 25 pls. £16.00.

This work covers the little known mummy cases in University College but does not include the Roman period material. In addition it catalogues over 400 funerary cones in the collection which the author hopes will supplement the valuable Macadam corpus.

The first section contains accounts of 19 mummy cases and related burial equipment, ranging from the Eleventh Dynasty to the Ptolemaic period. Each item is described under material, dimensions, provenance and period. Indexes of University College registration numbers, personal names and titles, divinities and site locations are also given. The second section deals with 161 funerary cones which are similarly treated, and concordances and indexes are added to correlate with Davies' and Macadam's corpus.

The book contains a bibliography and list of abbreviations. In general it is a well laid out and workmanlike study with a few photographs and of course a set of line drawings of the high standard that one associates with the author.

E. P. UPHILL

ALLCHIN, Bridget and Raymond. *The rise of civilization in India and Pakistan* (Cambridge World Archaeology). Cambridge, Cambridge University Press, 1982. xiv + 379 pp., illus. £25.00; paperback £8.95.

The book is probably the most readable general introduction to the pre- and proto-history of the Indian subcontinent published so far. It ranges from the Palaeolithic period to the Iron Age and is organised in three parts whose centre-piece is of course the Indus civilisation of Harappa and Mohenjo-

daro. The first part deals with prehistory and environment and the gradual development from hunter-gatherers and nomadic pastoralists to farmers. From the beginning, the authors stress the geographical realities of the subcontinent which, quite apart from purely cultural determinants, set a long and essentially regionally disparate pattern. Part III is concerned with the 'legacy' of the Indus civilisation, up to the emergence of 'classical Indian civilisation' in the Iron Age. All chapters have useful summaries and these reiterations often clarify streams of reasoning which are sometimes obscured owing to the essentially descriptive and conversational style of the book. Maps, chronological tables, line drawings and half-tone plates enrich the text throughout.

The book is not meant to be an exhaustive technical research manual, but a general overview of the current evidence. As such it succeeds, but for a few minor discords. These concern somewhat jarring (didactic) passages which begin in the first chapter. Many useful, general concepts - more or less standard for the philosophical etiquette of prehistorians - of what should or should not be done, are included: but among them is one recurring, subjective condemnation of 'large scale excavations' (p.5). And yet, in the same book, we often read that '...relatively little (is) known...(because) the few excavations have mainly been on a small scale' (p.100). Such utterances, particularly self-contradicted ones, are quite out of place. They tend to indicate a lack of understanding of the nature of historical archaeology where 'problem orientation' - which is quite applicable - is a much larger concept than for prehistory; they also tend to open old ideological wounds unnecessarily.

On the other hand, such thinking may have crept into the text inadvertently, and simply because the authors had to tackle both kinds of enquiry in one volume. It may simply reflect a frustration over lack of published evidence that is shared by all researchers, prehistorians as well as historians.

This aspect aside, the main criticisms are minor and academic.

At first reading, the rather familiar, discursive style without proper bibliographical references is annoying: but, when the core of the book is reached, this is no longer so. Ironically, the core of the book is of course the one part that has a real story to



tell, in the traditional, more sensational sense. Yet the work is, after all, a general one and there are well-known restraints on authors of such books where 'scientific notation' is concerned. However, there is a certain unevenness in referencing which is harder to fathom.

For the most part references are not documented by date; they are often gratuitous, vague (see for example p.33 '...studied by a small band of geologists and prehistorians') and cannot be readily extracted from the selective, annotated bibliography given at the end of the book. Then, suddenly (see p.309) properly dated ones appear: without the expected alphabetical list. Similarly, uneven listing of sites in the discussions is confusing and frustrating. A referenced list would greatly enhance any future lineal descendant of the series Birth, Rise and whatever, of civilisation. Possibly Bangladesh ought to be included in any future title.

Such things apart, the work normally presents one of the most reasonably balanced treatments of the Indian and Pakistani archaeological record to be found anywhere. Throughout the authors caution against jumping to conclusions; throughout they qualify many of their own ideas, in the end leaving the reader with a clearer idea, not only of the background to the historical periods, but also to the nature of archaeological evidence as it emerges, slowly and painfully, in publication. It is, for example, good to hear that although 'nowadays unfashionable' (p.133), the movement of peoples is nevertheless a viable mechanism of prehistory, as it has been of history. Likewise, the sections dealing with the north-eastern neighbours of the subcontinent are lucid and provide well-reasoned descriptions of what may be reconstructed at this time.

S. W. HELMS

RATNAGAR, Shereen. *Encounters: the westerly trade of the Harappa civilization*. Delhi, Oxford University Press, 1981. xxi + 394 pp., 30 figs., 3 maps. Rs. 120.00.

Turning a good PhD thesis into a book is not easy but this book represents a very successful effort in this respect. The subtitle gives a reasonable idea as to its content. Trading contacts between the Indus valley and Mesopotamia during the 3rd millennium BC are investigated. Much of this trade went via the Persian Gulf using Dilmun, now generally equated with Bahrein, as an entrepot. The author discusses in considerable detail the materials and objects traded, their possible origin and destination, and the cultures involved. A philological discussion on the location of Dilmun, Magan and Meluhha is given. Magan is generally accepted as being a northern extension of Makran ie. the Iranian-Pakistan territory on the north side of the Gulf. This also has copper as we know from recent developments in this part of Iran. Meluhha is identified with Western India in the early period, but the term was transferred to Nubia or Ethiopia in the 2nd and 1st millennium.

The middle of the book covers the mechanisms of trade and the organisational aspects and the various incentives for trade. From the goods, their movement, and the geographical setting the author considers the resources and economic organisation of each of the participating societies.

While sea transport dominates the scene, sites in Siestan and Baluchistan and, of course, Tal y Yahya get some attention, although it would appear that much of their trade took the shortest route to the sea which was always easier and superior. Here we are treated to a description of the course of the Helman river from the Hindu Kush Highlands in present Afghanistan to its disappearance in Siestan. We are told that Hammi-Helmand is the largest expanse of fresh water in Iran based on a reference dated to 1910. Unfortunately this tempting description of unlimited expanses of fresh water is no longer true, as damming of the upper Helmand river has caused a great change in the landscape of this region.

The book concludes with the application of the recent theories of the anthropologists relating to prestige and status as motivating factors in trade between prehistoric societies.

This is a useful book for the researcher and gives most of the references available for materials being traded in this part of the world and a reasoned discussion on the

results of modern research. This is a source book rather than a literary essay and can be well recommended.

R. F. TYLECOTE

ALLCHIN, Bridget (ed.). *South Asian archaeology: proceedings of the sixth International Conference of the Association of South Asian Archaeologists in Western Europe, held in Cambridge University, 5-10 July 1981*. Cambridge, Cambridge University Press, 1984. ix + 346 pp., illus. £35.00.

The concept of these Conferences is a grand one; an inter-disciplinary, co-operative cultural master plan for the Farther East that began at Cambridge in 1971. F. R. Allchin outlines the credo in his presidential address (p.1 ff) which he concludes by saying that 'I do not want to sound unduly self-congratulatory...': but hearty congratulations are precisely what is deserved for this family project that has achieved truly international status in a remarkably short time. The all-encompassing nature of the work shows, on the whole, a laudable absence of partisanship which is one of the great temptations of such enterprises. Mrs Allchin's editing ability which covers a great many projects, including the Society for South Asian Studies, is monumental. Prompt publication, even of other people's work, is rare.

Organised in chronological order, the published papers cover a broad spectrum of interest; from man-animal relations during the Holocene to pre-Mughal monuments in Bangladesh, from mystical architecture and the axis mundis to detailed surveys of vast medieval ruin fields, from Queen Maya's dream and its potential erotic content to metallurgical investigations of Indian coinage.

In keeping with the precepts of the Conferences since 1971, over half of the book deals with three of the major areas of investigations and their relevant projects:

Mehrgarh, Shahr-i Sokhta and the Indus Valley Civilisation (pp.21-204). Included are valuable summaries of chronology (Jarrige, p.21 ff), faunal remains (Meadow, p.34 ff), flint analysis (Lechevallier, p.41 ff), detailed ceramic analyses (Bisicone, p.69 ff and Vidale, p.81 ff) and important new Harappan material from beyond the Hindu Kush (Francfort, p.170 ff).

By comparison, the rest of the book is less useful since the papers there are more concerned with syntheses - some rather baffling - and the minor arts. The Proto-Historical section - whose precise definition is not clear - is far too short, as is the section on the Early Historic and Buddhist periods. More detailed reports of the important work at Tepe Sardar (but see Taddei, p. 263 ff) would have been very welcome, particularly its relative chronology. Klaus Fischer's paper, on the other hand, provided at least a humorous, intellectual excursus (p.250 ff). Sadly, the published paper had to be shortened. A curious omission here is the presented paper on the Society for South Asian Studies' project (begun in 1974) at Old Kandahar in southern Afghanistan.

S. W. HELMS

LEWIS-WILLIAMS, J. David. *The rock art of southern Africa* (The imprint of man). Cambridge, Cambridge University Press, 1983. 68 pp., 26 figs., 84 pls., 2 maps. £12.95.

This work is one of four so far in an internationally published series on prehistoric art. Like the others in the series, its text is brief and its illustrations are many, and the same conventions - short bibliography, no index, no list of illustrations but frequent reference to them in the text - are followed. This format suits Dr Lewis-Williams well and he manages without wasting words to produce a very interesting interpretative study of the rock art in southern Africa by approaching it through what is known of the systems of thought of the Bush-



men (or San), who were responsible for much of the early art of this region.

Topics touched on in this survey include a short historical review of the study, relevant ethnography, some aspects of methodology and dating techniques, the content and cultural context of the art and especially its interpretation. Lewis-Williams quotes at length Sir John Barrow, who visited some decorated sites in 1797-8 and who, so early, made some well informed and apposite remarks on what he saw, and this gives the keynote of the book. The study of southern Africa rock art has greatly benefited not only from extensive work by European ethnographers but also from direct explication by living native practitioners and observers of the art, and Lewis-Williams' account is informed throughout by these sources.

There are many thousands of rock art depictions in southern Africa - human beings, animals, therianthropes, vegetation, artefacts and signs of known and unknown significance. To understand the art, '...we must identify the key metaphors which feature in Bushman myth, ritual and, I argue, also their art' (p.43), and, 'An understanding of the activities of Bushman medicine men is essential to an interpretation of the art, because some of the medicine men were probably also painters' (p.21). The trance, used by the medicine men in their efforts to effect cures, to control the antelope or to make rain, is often represented in the art, with the 'potency' of the trance indicated by clapping and dancing men and women, some with noses bleeding (caused by the potency), and by supernatural entities and events thought to be seen only by medicine men. 'The details in such paintings suggest very strongly that they were painted by those who actually experienced the hallucinations of trance rather than by others to whom medicine men described their experiences' (p.21).

The eland is another key metaphor in Bushman myth, dance and life-crisis ritual. It is the largest antelope, an easy prey for the hunter and a good and much valued food. 'All other animals are like servants to the eland', Lewis-Williams was told (p.44). It is depicted in many situations - grazing, sitting, running, dying and dead, in conjunction with human beings or other animals or on its own. Sometimes the medicine men seem to be decked out as elands, with horns, humps and eland cloaks. '...the painters, with their understanding of the creative relation-

ship between death and power, graphically superimposed the eland's associations on the medicine men to make a subtle and complex statement about their central religious ritual. All three contexts - myth, ritual and art - were thus linked by metaphor: the eland was a unifying thread running through Bushman belief and ritual' (p.53).

In southern African rock art, juxtaposition and superimposition of images are frequently found. It was possible for a later artist to juxtapose or superimpose images onto earlier work because the symbolic associations remained more or less constant. 'In painting his own work the artist was participating in a continuing tradition rather than creating individual *objets d'art*' (p.55). As David Lewis-Williams convincingly demonstrates in this stimulating book, an increased knowledge of this continuing tradition will undoubtedly point the way to further insights into the significance of this rich corpus of art.

ALEX HOOPER

SANDERS, William T., PARSONS, Jeffrey R. and SANTLEY, Robert S. *The Basin of Mexico: ecological processes in the evolution of a civilization*. London, Academic Press, 1979. xiv + 561 pp., figs., 12 maps. £28.00.

Published in 1979, *The Basin of Mexico* remains a seminal book at this review. It comprises four sections and certain specialised topics in five appendices.

Chapters 1-3 define, describe and discuss the field methodology used over 20 years of field work in the Basin. These have inevitably become less important as field techniques have advanced on the base of this work's experience and that of later field work. Not all archaeologists will agree with the authors' emphasis on '100 per cent samples' nor will they accept that the

basic goals and methodology could have remained the same over 20 years (as an archaeologist-time-capsule?).

Chapters 4-7 describe the cultural history of the Basin and the processes of its development. These chapters will remain the most valuable part of the book as they still stand as one of the best, most succinct syntheses of central Mesoamerican cultural development. The accompanying maps are the most valuable for comparison of settlement patterns through the cultural periods and phases (but as temporally adjacent periods are printed on both sides of the sheets, comparison is difficult unless two sets of maps are used). New data do not and have not necessarily rendered incorrect the general conclusions reached. This reviewer would point out two faults: the detailed, corroborative data are not included in the book for lack of space, and at the time of publication were either not yet published or widely scattered in numerous bits and pieces; this remains the case. Secondly, the renaming of the periods-phases seems to me unnecessary and in hindsight has proved at best only partly accepted, and at worst more confusing. The authors' reasons were because the old Preclassic/Classic/Postclassic, and subdivisions, were too 'value charged'. While many professional archaeologists - though not all - may have been converted to the scheme, the old scheme remains extremely useful, for its simplicity, in more popular writing; and the 'value charge', in my opinion, is with the user/reader, not implicit.

Chapters 8-9 are a theoretical and thematic discussion of cultural evolution in general. This will of course remain the most controversial section, and will continue to stimulate debate. The authors propose a model hinged on 'internal factors' such as circumscription and population growth in deliberate contrast to other models relying on 'external factors' such as the effects of other cultures or of the environment. All models, however, are by definition simplifications for analytical purposes, and therefore incomplete; and in that sense it is unclear to this reviewer how environment is an 'external factor' - is not the environment the medium within which the culture develops, as a part of the environment, both affected by it and affecting it, and thus integral, not separate from it in an internal/external dichotomy?

So, chapters 1-3 and 8-9 have stimulated

much new work and will continue to be argued over. Chapters 4-7 will remain a valuable synthesis for some time to come. And all have stimulated and will continue to stimulate and influence future work in the Basin and elsewhere in Mesoamerica, much of which work was suggested by the authors themselves in their tenth chapter.

DAVID M. JONES

LANGE, Frederick W. and STONE, Doris Z. (eds.). *The Archaeology of Lower Central America* (School of American Research Advanced Seminar Series). Albuquerque, University of New Mexico Press, 1984. xiv + 476 pp., illus. \$45.00.

This book is the result of a seminar on Lower Central America held in April 1980 at the School of American Research in Santa Fé, New Mexico, bringing together a number of people who are actively involved with archaeological work in the isthmian area and who are largely responsible for the information available to date.

Compared to neighbouring Mesoamerica and South America, Lower Central America has remained a neglected area archaeologically; little systematic work was done before the 1950's, and scientific research became firmly established only in the 1970's. Serious investigations to date have thus covered still only a fraction of the total area.

Nevertheless, this book draws together a large amount of new data and presents an important overview of what is known today archaeologically of El Salvador, Honduras, Nicaragua, Costa Rica, Panama and Northern Colombia. It is neatly divided into five parts, beginning with a History of Lower Central American Archaeology by Doris Z. Stone and a chapter on the Cultural Geography of Pre-Columbian Lower Central America by Frederick W. Lange, in which he stresses the importance of a 'geographically/ecologically based understanding of the area in order to comprehend the cultural development



of the region'. He emphasises the comparative ease of access between the Pacific and Atlantic coasts and deplores the fact that research investigating the prehistoric interaction of goods and ideas between the two zones has been so very limited until now.

Part II consists of three chapters dealing with the Northern Frontier of Lower Central America. Robert J. Sharer looks at the region from Mesoamerica and sees economic factors as being the most important in the Mesoamerican/Lower Central American interaction. Payson D. Sheets reviews the prehistory of El Salvador and infers that, from the earliest sedentary societies to the Post-classic Period, El Salvador was much more closely affiliated to Mesoamerica than with the isthmian area. Paul F. Healy's survey of Honduran archaeology also reveals distinct Mesoamerican affiliations with, however, a strongly fluctuating pattern through time, and with the northeastern region remaining clearly separate from the rest and apparently related southward to Caribbean Lower Central America.

Part III has four chapters dealing with the Lower Central American core. Both the sections by Frederick W. Lange on Greater Nicoya, and by Michael J. Snarskis on the Lower Caribbean and the Central Highland area of Costa Rica, offer a large amount of new information and show how much archaeological research has increased in this area since the 1970's. For example, there was virtually no knowledge on prehistoric settlement patterns until recently, and now we have complete houseplans dating back as far as 2000 years ago. Wolfgang Haberland's review of the archaeology of Greater Chiriqui does not, unfortunately, include new data published in 'Adaptive Radiations in Prehistoric Panama' (Linares and Ranere [eds.], 1980). However, Haberland's summary is supplemented by a chapter from Robert Drolet, whose recent survey and mapping operations in the Diquis Valley of southwestern Costa Rica add significant information on an area hitherto practically unknown archaeologically. In the chapter about archaeological research in Central and Eastern Panama Richard Cooke shows that, at present, Panama has the most complete record for the Preceramic Period in Lower Central America. Cooke concentrates principally on three themes: new evidence for early maize cultivation, the threshold of sedentary village life, and faunal analysis. He makes a strong plea to all archaeologists in the isthmian area for the collection of

more data on aquatic organisms.

In Part IV Warwick Bray looks at the rather shadowy Southern Frontier of Lower Central America. He believes that 'ceramic data grossly underrepresent the amount of interregional contact at all times' and suggests that a pattern of 'down-the-line' transmission of ideas, techniques and portable goods may explain the evident contacts between northern Colombia and the isthmian area.

In Part V of the book Gordon R. Willey, in his inimitable style, gives a splendid summary statement. He refers also to the area-wide chronological scheme of six major Periods which the seminar group agreed upon in order to facilitate an archaeological overview of the area.

This is an immensely welcome reference book to an area which has for too long been regarded merely as a corridor connecting the civilisations of Mesoamerica and South America, but is now slowly emerging as a region with a definite cultural individuality of its own. There is no comparable literature at present. The book could be enhanced by more illustrations.

URSULA JONES

DE DURAND-FOREST, J. (ed.). *The native sources and the history of the valley of Mexico: proceedings of the 44th International Congress of Americanists* (BAR Int. Ser. 204). Oxford, British Archaeological Reports, 1984. 268 pp., illus. £12.00.

This publication is a collection of ten papers read at the 44th International Congress of Americanists (ICA) in Manchester, England, in 1982. Although one session of the ICA held in Paris in 1976 was dedicated to 'the Ethnohistory of the Valley of Mexico from the Native Sources in Nahuatl', it was suggested by H. B. Nicholson that the subject should be extended to include all

the indigenous types of expression.

The papers are organised in chronological sequence. The first paper, by H. Prem, provides an analysis of various types of distortion in Central Mexican historical sources and their effects on chronology of the sources dealing with the Pre-Conquest history of Central Mexico. The chronological 'dilemma', as Prem calls it, is a serious one. He shows that there exists no historical source for Pre-Colonial Central Mexican history which offers a trustworthy relative chronology. He demonstrates that the works of P. Kirchhof, A. Caso, W. Jimenez Moreno and N. Davies have not settled the problem of the chronology in historical order: first, the reconstruction of monodirectional sequences (for example, genealogies of ruling families) or spatial sequences that contain temporal elements (for example, conquests). The second method is probably the converse of that used by most scholars. It concentrates on dates of local relevance, as opposed to the system of using the most prominent data as a basis for the reconstruction of year counts. With the intention of utilising to the full local historical data, Prem started a research programme called DECODEZ, which aims to create a data bank for all the pertinent information contained in Central Mexican sources. Hopefully this new tool will help to resolve the chronological dilemma.

The second paper, 'Aspects mythiques des peregrinations Mexicas', by M. Graulich, covers various aspects. First, he makes it very clear that the migration myths of the Mexicas are doubtful. Secondly, the theme of humble beginnings versus the rich sedentaries seems to be commonplace in Central Mexican mythology, as well as in some Maya groups. Both these points are very well argued. One obsession in Graulich's thought seems to be the theme of the expulsion from paradise, for which he has often been criticised (by Heyden, Kohler, and others). He over-emphasises Christian concepts, especially those of a paradise-like Tamoanchan.

Graulich makes a good point by stating that the Mexicas not only learned cultural aspects of the groups that preceded them, but also inherited less tangible symbolic structures, which were not acquired voluntarily but were actually imposed.

In the third papers, on 'The Extent of the Tepanec Empire', Pedro Carrasco shows, among many other important aspects, the par-

ticipation of the Mexica and Tlatelolco as fundamental in the formation of the Tepanec Empire, a point sometimes underestimated by scholars.

He also makes a plea for giving room to the possibility that Tlachco may have been part of the Tepanec domain. Carrasco does not try to trace the historical development of Tepanec power, but he does stress the fact that the empire coincided with the rule of Tezozomoc and that, when he died, this led to the fall of the empire. Carrasco's new insights help us to understand the way the Aztecs used already existing forms as a base for their own empire. E. Quinones-Keber's study, 'Art as History: The Illustrated Chronicle of the Codex Telleriano-Remensis as a Historical source', is also a good contribution. She assesses the value of this early colonial document, which blends image and text in a unique way. As a historical source, it records the events that occurred in the Valley of Mexico under the nine rulers of Tenochtitlan, since there are folios missing covering the years 1519 to 1528.

The images seem to have been executed by several hands supplying texts of varying lengths, and accuracy. The pictorial manuscript records not only persons and places but also a variety of events, ie. rulers' successions and deaths, astronomical phenomena, natural disasters, religious ceremonies, and conquests that took place during the reigns of the Mexica rulers of Tenochtitlan. Quinones has emphasised the value of the document, since no pre-Hispanic pictorial chronicles survive from the Valley of Mexico. This paper is particularly interesting because of the comparisons she makes with other related manuscripts from the above mentioned area.

Marc Eisenger's paper is a very thorough study on the neologisms and Spanish words introduced in the Nahuatl text of the Florentine Codex, Books 1, 3, 5, 6, 7 and 9 by Bernardino de Sahagun. Eisenger notes that most Spanish words used in the Nahuatl text appeared in a limited number of semantic contexts such as proper names, the catholic religion, civil titles, rhetorics and measures. This is hardly surprising; certainly those subjects are difficult to express in a non-Western culture.

Another paper based on the Florentine Codex is Marc Thouvenot's 'Turquoises accord-



ing to the Florentine Codex Vignettes'. He studied the vignettes in three stages:

1. analysis of the drawing;
2. comparison with other pictographic documents;
3. confrontation with the Nahuatl text.

The text was considered after studying the vignettes, to avoid any influence on the perception of the drawings. In order to understand the vignettes Eisenger recommends, among other things, the analysis of their layout, their shape, the details which characterise them, their orientation, their coloration, and the relationships between them, that is to say the relative positioning of two or several elements. The vignettes are basically made up of glyphs with a phonetic function, which has enabled Thouvet to consider them as pictographic texts.

Nigel Davies's contribution to the volume, 'The Aztec Concept of History: Tula and Teotihuacan', is again a useful one. He draws attention to the need for careful study of the concepts of Aztec history. Their historical records must be treated with caution. Their chronology is based on the notion of cyclical time, and as a result one event may be attributed to different stages. Furthermore, myth is intertwined with fact, so one must disentangle the two. Davies clearly illustrates the Aztec concept of history, viewed through the cases of Tula and Teotihuacan.

'De l'attribution du Manuscrit No 342 de la Bibliothèque Nationale de Paris' is the paper contributed by the editor of this volume, J. de Durand-Forest. According to J. Glass, the Ms 342 had been attributed to Chimalpahin. De Durand-Forest accepts that the Manuscript 342 has similarities with Chimalpahin, but there are also differences, of which she lists several. The Ms Mexicain 342 has similarities with both Chimalpahin's 7th Relation as well as with the *Cronica Mexicana*, so she reaches the conclusion that all three documents suggest different authors.

The last two papers of this publication were written by Antoon Vollemaere and Constanza Vega Sosa respectively. The first of these, 'Interrelation des Manuscrits Mayas et non-Mayas', concludes that there is a closer cultural and graphic relationship between Maya and non-Maya manuscripts than

has ever been thought.

The last paper, 'Analysis and Interpretation of some Glyphs on Aztec-Style Vessels', deals with a seriation of glyphs. According to the author, the glyphs are related to astronomical knowledge, such as the different stages in the course of the sun.

One minor complaint is that most of the abstracts in Spanish do not correspond with their English/French equivalents. This could have been easily corrected. There are also some over-literal translations that make no sense whatsoever in Spanish.

All in all, this book is an important contribution to the understanding of the native sources and the history of the Valley of Mexico.

ELIZABETH BAQUEDANO

MORRIS, Craig and THOMPSON, Donald E.  
*Huánuco Pampa: an Inca city and its hinterland* (New aspects of antiquity). London, Thames and Hudson, 1985. 181 pp., 36 figs., 76 (monochrome) pls., 13 col. pls. £18.00.

Huánuco Pampa was the Inca imposed centre for the Huánuco region, a mountainous area with great environmental diversity typical of the Andes, approximately midway between Cuzco, Peru and Quito, Ecuador. The impetus for the archaeological study of the area was two ethnohistoric accounts of the same region; one abbreviated record from 1549 and a more detailed inspection from 1562, though both demonstrate the destructive effects of the fall of the Inca state in 1532 (Huánuco Pampa itself was in ruins and administration was already being imposed from the Spanish centre of Huánuco some 150 km away), the records have a large amount of information on the ethnic groups and affiliations of local communities - their size and make-up, and this is believed to be relatively unaffected by the conquest. The archaeological work centres on Huánuco Pampa,

which on the whole is well preserved and, the authors believe, little disturbed by later activity, but it is also concerned with tracing the local settlements in the ethnohistoric accounts and investigating them. 'It is with the way document and archaeology can be used as complementary sources that we will be primarily concerned in this book' (p.21).

The book opens with the (obligatory?) description of Pizarro's capture, ransom and murder of Atahualpa before giving a short introduction to the ethnohistoric documents (this is disappointing, being too short and not giving a full description of the contents and biases of the original survey). The authors' description of the Inca state is necessarily brief and perfectly adequate; however, such comments as 'Accounts which attribute responsibility to the state for feeding the population appear to be misplaced: except for certain state personnel the responsibility was shouldered at the local level' (p.25) could have benefited from some proof or a reference.

Throughout the book there is mention of 'material still being analysed' (p.90), 'analysis is still underway' (p.79), 'the lengthy task...has still not been undertaken' (p.58), and my feeling on finishing the book was, why not wait until this work has been done before attempting an appraisal of the whole project - aimed at a non-specialist reader? An intermediate report could easily have been more interesting and not resulted in attempts to characterise areas of some 5000' metres of the site on as little as 500 rim fragments with no mention of where this 'sample' came from or what biases may have been affecting it (p.77).

The lack of photographs of finds from the sites necessitating photographs of materials from other sources also may have been avoidable at a later date.

The use of complementary written and archaeological sources is disappointing because neither is full explained, particularly the 'archaeological' work on the outlying settlements which is in the main a rather wordy description of the architecture and layout, and a very simple ethnic grouping of the ceramics.

The conclusions I found original, interesting and often believable. The authors suggest that Huánuco Pampa is an imposed

centre with a relatively small permanent population with frequent large influxes for state ceremonies and state duties. However, the surrounding communities are thought to be only slightly affected by the Inca presence and largely continue a similar life-style from pre-Inca conquest until immediately post Spanish conquest.

Whether the book is aimed at 'students of South American archaeology' (p.7) or 'those less familiar with the Inca world' (p.7 and 8) or both as the book suggests, the absence of a statement on digging methods and what possible biases the materials recovered may represent, or any mention of work on the flora and fauna (though reference to some survival of such remains is made) gives an impression of archaeology that does a disservice to the authors and the readers alike.

W. J. M. SILLAR

OFFNER, Jerome A. *Law and politics in Aztec Texcoco* (Cambridge Latin American Studies). Cambridge, Cambridge University Press, 1983. xvii + 340 pp., illus. £25.00.

This book is highly specialised and extremely detailed. It requires careful, concentrated reading, and offers abundant information. As a general student of Mesoamerican culture I learned a tremendous amount from it. In some measure it can be compared to the two most easily available works on Aztec society: Jacques Soustelle's *Daily Life of the Aztecs*, and Frances Berdan's *The Aztecs of Central Mexico*. Because it concentrates on the Texcocan Aztecs (the *Acolhua*) it often gives more detail than these two; on the other hand, and for the same reason, it is not so wide-ranging or widely-applicable. Nevertheless, it redresses a longstanding, imbalanced picture of the rise of the Aztec (ie. *Mexica*) Empire and shows *Acolhua* contributions and influences more fully and clearly.



The title sounds more confined in subject than is actually the case. Offner takes a laudably wide definition of 'legal' and includes much socio-cultural-economic information, as well as interspersed but easily recognised interpretation. Section 1 outlines the movements of Aztec tribes into the Basin of Mexico, the establishment of Acolhuacan and its territories, and sets Acolhua holdings into the wider context of inter-tribal conflict, including an outline history of its early rulers, the Triple Alliance and the conquest of Azcztotzalco. Section 2 traces the development of Acolhua legal systems, describing the various contributions of the principal rulers and a larger section on Nezahualcoyotl, about whom our sources are best.

These two sections are 'introductory' and only go a little beyond existing secondary literature. The succeeding four sections form both the bulk of the text and of the thesis. Section 3 is a detailed description of the formation of Acolhuacan and the organisation of its territories, including diplomatic machinations. Section 4 details the class structure of the Acolhua, with separate subsections on the aristocratic and ruler classes, including discussions of land tenure, population distribution and educational achievement. Section 5 focuses on local-level politics, with minute detail on *calpulli* administration, and on kinship structure and its manifestations. Finally, Section 6 is more interpretive, discussing the theory of Acolhua law and the practicalities of its everyday application. Additionally, 43 tables, 20 figures and 3 maps illustrate the text.

DAVID JONES

FREIDEL, David A. and SABLOFF, Jeremy A.

*Cozumel: late Maya settlement patterns* (Studies in Archaeology). London, Academic Press, 1984. xvii + 208 pp., 51 figs. \$31.00.

Cozumel is a rather small island located

some 16 kms east of the NE coast of the Yucatan peninsula. It is an island that was believed to have been well settled during the Decadent period just prior to European contact. However, apart from a few turn of the century surveys, the island has received but little attention from archaeologists. The Cozumel Archaeological Project, run jointly by the Peabody Museum and the University of Arizona, was established in order to change this by improving our knowledge of the island from careful exploration and survey. This text is one of a series of reports on the findings of this research.

The two main goals of the Cozumel Archaeological Project were to broaden and change traditional conceptions of ancient Maya trade and to increase our understanding of the nature of the Decadent period in the Yucatan. This monograph assists in achieving these goals by its concentration on the spatial organisation of trade and Decadent period settlements on the island. The authors attempt to determine what factors caused this spatial organisation and Cozumel's role in long distance trade by surveying more than 30 sites and their constituents.

The monograph is divided into 3 parts. Chapters 2-5 consist of an examination of the functional typology of features on Cozumel, ie. the formal structure types, perishable or masonry structures, sacbes, fieldwalls, etc., and the structural assemblages. In other words, the function of various types of structures is determined from formal typology, ground plan and location of structures, based on shared traits and the expected correlation that form follows function, and artifactual remains. Determining the function of some Maya structures is not an easy task given the often limited architectural and material remains, but with liberal use of ethnohistoric data the authors' determinations are laudable. I was particularly impressed with their arguments regarding the 6 types and 5 locations of religious structures (chapter 3) and the location and use of sacbes and fieldwalls (chapter 4). The second part then consists of a lengthy sixth chapter in which the site data of the 8 sites are described in detail, and a final part consisting of a brief chapter on the demographic patterns on the island and the last (chapter 8) synthesising the social, political, religious and economic organisations on the island during the Decadent period.

Out of all this their preliminary survey revealed an island-wide system of walls, a coastal shrine system, a probable system of sacbes, nucleated settlements with outlying shrines, community rather than family shrines, and a variety of patterns related to inferred building functions. These findings then provided them with the following 4 main interpretations:

1. populations moved from shrine to shrine via the sacbes on pilgrimages celebrating festivals at specific shrines;
2. shrines were sanctions to traders whose travels had to be sanctioned in order to maintain their safety and success as traders;
3. warehousing facilities were nucleated but scattered around geographical or political frontiers; and
4. long distance trade and local exchange were closely interrelated.

These interpretations are very important, and if true, change our conception of trade and religious belief during the Decadent period. One may or may not agree with these interpretations but given their well described and fairly sound method and analysis it is difficult not to. With this text alone the authors have largely attained the two main goals of the Project: broadening and changing our conceptions of ancient Maya trade, and determining the nature of the Decadent period in the Yucatan. As an introductory report on the findings of the Cozumel Archaeological Project one can not but be impressed. I now eagerly await the other reports.

BRUCE WELSH

HAMMOND, N. *Nohmul: A Prehistoric Maya Community in Belize. Excavations 1973-1983* (BAR Int. Ser. 250). Oxford, British Archaeological Reports, 1985. 2 vols. xx + 771 pp., 382 figs. £50.00.

This report is a synthesis of the work done at Nohmul in northern Belize by the Corozal Project in 1973-74 and 1978, and the Nohmul Project in 1982-83. Written in two volumes, it should be considered pretty impressive by any standards.

The first chapter consists of a description of the local environment and its resources. The second consists of a brief description of Nohmul, its location, and a review of previous excavations at the site. Most previous 'excavation' had been done by Gann earlier this century and Hammond adds three appendices to the chapter that contains sections of Gann's reports. I am not sure this is absolutely necessary as Gann is as much of a curse as a useful informant, but it does make for interesting, if not occasionally alarming, reading.

The third provides a commentary on the methods employed to excavate, ranging from surveying methods and recording conventions to map-making from aerial photographs and the establishment of a ceramic sequence.

Chapters 4-8 consist of summaries of the specific structures and sectors excavated, and the reasons why these structures or sectors were selected for investigation. The text is then completed with a summary of the most important discoveries and inferences, and a note on the reports that are forthcoming.

Each chapter of the text is supplemented by 382 figures consisting of aerial photographs and photographs of wetlands, structures, excavation layouts, sections, pits, etc. In other words, everything is included that should be included in a site report, and so far as the report is concerned it is a very good and thorough one.

I do, however, question the overall design strategy adopted by Hammond for these projects. He intended to acquire information on dates of foundation, subsequent construction, utilisation and abandonment of structures, and not necessarily to determine their



layout and function. This resulted in a series of test pits as opposed to surface survey and long, shallow trenches. For Hammond's purposes this was fine as he did make some useful discoveries, eg. that site history ranged from the Middle Formative to the Postclassic, that there was Yucatecan influence in Terminal Classic architecture, and that there was an interesting lack of Tzakol (Early Classic) sherds. The last discovery is particularly interesting because there was otherwise no sign of discontinuous occupation. This suggests that Tzakol sherds may merely be local to Uaxactún. If so then we may have to reconsider the presumed abandonment of Seibal during the Early Classic, an abandonment based on the absence of Tzakol sherds. So Hammond has made useful discoveries with interesting implications.

However, he paints an alarming picture of the destruction of sites and intersite areas as a result of increased road construction and the expansion of sugar cane plantations throughout northern Belize. Worse still is the potential for oil and gas fields in the area and the destruction this would entail from the exploration, drilling and refining. Given the fact that sites are already being destroyed one would have thought it more advisable to have conducted at least some areal surface survey before these areas and sites are permanently destroyed. As important as Hammond's discoveries are it is as important to salvage at least some information from these threatened sites than none at all. Let us hope he does so in future fieldwork.

BRUCE WELSH

MACKIE, E. W. *Excavations at Xunantunich and Pomona, Belize, in 1959-60: A ceremonial centre and an earthen mound of the Maya Classic period* (BAR Int. Ser. 251). Oxford, British Archaeological Reports, 1985. 216 pp., 21 figs., 65 pls. £20.00.

This report of the excavation of Xunantunich

took place more than 25 years ago as part of the explorations of the Cambridge Expedition to British Honduras in 1959-60. It has taken rather a long time for the report to see the light of day, but better a late report than none at all.

In the report, MacKie informs us of the basic design of the excavation: to excavate the top layers of deposits of three of the larger mounds and one house mound. As a result, the final form of the structures beneath these mounds was determined but the chronology of the structural development was not. The amount of time and money available gave him little alternative. What was found has been carefully recorded and described. Most of the observations are what one would expect from any lowland Maya site, but there are two observations worth commenting upon.

The first regards the five burials found in the residential structure, A-15. In the three burials in which skeletal position was determined, the interred were extended and prone with head to the south. Interestingly, this is the same as the prevalent position at the Belize Valley sites of Barton Ramie and Baking Pot, perhaps demonstrating regional conformity in burial position. (The prevalence of the extended, prone position is confined to these sites only.) He also reports that no trace of the crania of the individuals in Burials 3 and 4 was found, though a cranium was found in a contemporary layer of a rubbish pit. Contrary to what he believes, such interments are *not* rare. There are several instances of missing crania in burials from other sites and these probably indicate sacrifice by decapitation. Such instances were reported by Landa and are visible in Maya art. The cranium found in the rubbish pit may, as MacKie suggests, be that of the individual in Burial 4, implying that it may have been on display before being tipped in the rubbish.

The second and more important observation regards that of a possible earthquake. MacKie had previously written secondary reports suggesting that Xunantunich had probably suffered an earthquake near the end of the Late Classic, contributing to, if not causing, the demise of the site. The evidence is published here for the first time, and without describing it here it is rather compelling. There does appear to have been an abrupt abandonment of the three large structures excavated. But there is not to my knowledge similar evidence at any other

site. Therefore, though an earthquake may have contributed to the abandonment of this site, I do not believe there was a similar effect elsewhere nor that an earthquake contributed to the collapse of the ancient Maya civilisation. The unusual evidence so far found makes it rather necessary that some of the remaining 21 large structural mounds off Xunantunich be excavated, more so since this is one of the largest sites in the area, and therefore, more likely to reveal structural damage consistent with an earthquake. To argue that Xunantunich was abruptly abandoned because of an earthquake requires all the corroboration it can get.

It is unfortunate that this site report took so long to be published since it is a site with such unusual evidence. At least BAR has provided a forum for site reports to be presented, compelling some, like MacKie, to publish theirs. Better late than never.

BRUCE WELSH

PURDY, Barbara A. *Florida's prehistoric stone technology: a study of the flint-working techniques of early Florida* (A University of Florida book). Gainesville, University Presses of Florida, 1981. xvi + 165 pp., 54 figs., 6 maps. \$25.00.

This volume, written by an experienced flintknapper, presents a detailed study of the prehistoric stone technology of the southern coastal state of Florida. The book begins with a brief introduction to the history of stoneworking in Florida by citing accounts of early explorers to the region, like de Soto. Very little contemporary documentation survives although it is clear that some 16th century Florida Indians were manufacturing and using stone implements.

The following chapter is a study of the typology of the stone artefacts and their place within the chronological framework of the Palaeo-Indian, Late Palaeo-Indian, Pre-ceramic Archaic, Early and Late Ceramic periods. This part, which relies on illus-

trations of the tool types described in the text, is mainly composed of photographs which lack clarity. Due to the difficulty of obtaining good quality photographs of flaked stone artefacts, it is usually better to illustrate them by ink drawings. However, the few drawings of stone tools which do occur in this volume are generally not of a very high standard.

The third chapter is devoted to the technology of the flaked stone artefacts. The author presents a good account of the manufacture of stone tools beginning with the procurement of raw material at the quarry. The methods of flaking stone practised by prehistoric peoples are discussed at length and a list of the specialised terms used by knappers is provided in the text. Purdy uses her knowledge as a flintknapper to provide much useful information on the methods and tools used to flake stone. However, in a few areas of her discussion she lacks sufficient depth. For example, in dealing with the complex subject of flaking tools she divides hammers (percussors) into two groups: 'hard hammers such as stone and soft hammers such as antler'. To classify all stone hammers as hard hammers is too simplistic. There are numerous publications describing the experimental use of soft stone hammers which can flake chert in a similar manner to an antler hammer.

The final section deals with the various scientific methods of analysing chert with special reference to dating. Included in this section are the results of work concerned with chemical and petrographic analyses, thermoluminescence dating and neutron activation analysis. In this chapter Purdy provides a comprehensive review of the kinds of techniques available to archaeologists when dealing with stone artefacts as well as outlining the areas in which they can be applied.

Purdy's book is a worthy contribution to New World prehistory and the archaeology of the southeastern seaboard of the United States. It will undoubtedly become a valuable reference work on lithic technology as well as the archaeology of Florida before the arrival of the Europeans.

C. A. BERGMAN



GOODALL, Harrison and FRIEDMAN, Rene. *Log structures, preservation and problem solving*. Nashville, Tennessee, American Association for State and Local History, 1980. 119 pp., illus. \$10.95.

The log cabin of the New World provided a rough and ready solution for the need of shelter by the Early Settler. The majority were never intended to serve the needs of more than one generation.

Over the last twenty years or so there has been increasing interest shown in these structures, either through a desire to recapture a simple 'back to the woods' lifestyle that never was, or the more laudable desire to study the structures for their intrinsic worth.

This book provides a practical blow by blow account of the stages in rebuilding of log structures, backed up by the authors' first-hand experience. Each step of the remedial work is illustrated either by photographs or line drawings. Common problems encountered are warping of timbers and the decay of timbers so they are no longer structurally sound.

Interspersed with the practical guidelines on restoration are a number of more philosophical discussions on this type of restoration work. They stress the need for detailed recording, both as a record of what has been removed and as an aid to the remedial work on decayed sections. The authors draw attention to the fact that in the case of an historic log structure a full archaeological survey may be necessary. They then go on to discuss the level of restoration to be attempted and how practical or even desirable it may be to use the correct materials and methods for a truly historical restoration.

The log structure has never played a major role in the English vernacular building traditions, although there is some documentary evidence to suggest that the technique was used in the north of England until the 16th century (Brunskill, 1985: 25). The absence from England is probably easily explained by the unsuitability of the hardwoods as compared to the softwoods of the New World and was also due to heavy demand for the timber which would make such construction techniques prohibitively expensive. The tradition

is, however, found in Scandinavian countries, where one may perhaps look for an origin for the North American examples.

In summary, although this book was not primarily written with the archaeologist in mind, it does provide much valuable information on the technology of the log structures. The authors have also shown themselves aware of the historic potential of many of these buildings and the desirability of making a harmonious restoration.

#### Reference

Brunskill, R. W. 1985. *Timber Building in Britain*. London.

W. D. COCROFT

HUNTLEY, B. and BIRKS, H. J. B. *An atlas of past and present pollen maps for Europe: 0-13000 years ago*. 2 vols. Cambridge, Cambridge University Press, 1983. xiv + 667 pp., illus., 24 maps. £85.00.

In the palynological world, the publication of this work has been eagerly awaited for some years. The final product is a two volume boxed set published by Cambridge University Press in their usual size format for larger palaeoecological works comprising 667 pages (Vol. 1) and 33 transparent map overlays (Vol. 2). The volumes present in written text and cartographical form a description of the European and northern Mediterranean tree taxa and a number of the more diagnostic herbs for the period 13000 bp to present. These volumes provide more than just a subjective description of these taxa in that the authors have utilised quantitative techniques to delimit the temporal and geographically changing patterns of the principal tree, shrub and some herb elements. This approach utilises the now large number and wide range of radiocarbon dates available for European pollen sequences. These have allowed the construction of isopollen maps; that is, isoline maps to portray the relative

importance of the taxa geographically at given time periods. This work represents a natural extension to the earlier work of Birks *et al.* (*Proc. Royal Soc. B* 189, 87-105) for Britain which showed in detail the marked regional variation in the dominant vegetation elements at 5000 bp. The result of these works is to remove the idea (still frequently found in archaeological literature) that pollen analysis has a primary role in dating by showing that a marked asynchronicity of vegetation change is evidenced when accurate radiometrically dated pollen profiles are pooled from a wide area. Thus, the results of the text under review utilise the work of many European authors as the primary data-base from which the isopollen maps have been constructed. The major part of the text-book is given over to the phyllogenetic histories of tree, shrub and herbs subsequent to climatic amelioration at the close of the last cold stage. This has been approached objectively utilising FORTRAN IV on the Cambridge University IBM 370/165 computer. In addition to allowing the plotting of detailed maps of the individual taxa this has also enabled the use of statistical techniques of which 'principal components analysis' has been effectively employed. The result has been the production of maps for the region at 1-2000 year intervals in principal components and composite vegetation maps. The objective quality of these data is enhanced by the inclusion of an appendix (Vol. 1) listing all the sites used in the data-base and a series of plastic overlay maps (Vol. 2) showing their distributional pattern and level of dating reliability.

The work has been excellently produced. The text, maps and layout cannot be faulted, being clear, concise and superbly written. It is likely to remain a key text for many years to come for students in a number of disciplines. Palaeoecologically, the taxonomic descriptions are an invaluable source of basic data on the present status and palaeoecology of all the principal tree and shrub taxa. To the archaeologist, the clarity of the maps at both generic and phytogeographical level should provide a readily available insight into the vegetative environment of archaeological sites throughout Europe. The site (pollen) overlays, appendix and bibliography provide a detailed reference source for all of the important European pollen sequences avail-

able at the time of publication and which one might expect to be amended with the addition of future accurately dated pollen sequences.

ROB SCAIFE

RICHENS, R. H. *Elm*. Cambridge, Cambridge University Press, 1983. xii + 347 pp., 152 figs. £35.00.

The last five years have seen the publication of a number of books discussing the natural history of the elm. These have been of variable quality and undoubtedly resulted from the demise of the British elm population from the late nineteen sixties through the ravages of Dutch Elm disease. The text under review is the latest and undoubtedly most authoritative discussion of what was a dominant feature of the landscape. Richens has attempted to bring together all facets of the elm's position in the environment including not only detail of the botany, palaeoecology and historical status of the elm but also data on the ecology of its living hosts. Thus, there are broadly based accounts of the fungi, viruses, bacteria, insect and bird communities associated with the genus.

The book is largely given over to an account of the elm from its earliest known geological records as fossils. The status of the elm during the present interglacial period (Holocene) has remained one of the great enigmas of palaeoecology/palynology. The widely recognised 'Ulmus decline' in the pollen record at c.5000 bp has been one of the most debated events in palynological literature. It is unfortunate that Richens does not give such an enigmatic event, which is also of marked archaeological significance, more than a superficial mention. He has, however, chosen to concentrate on the later historical records in considerable detail, providing well researched chapters dealing with the utilisation of elm as a resource from the landscape during the



Anglo-Saxon and Medieval periods and also from the cult point of view and even the representation of the elm in literature and art. A chapter on vernacular names is of great interest. The second half of the book (Chapters 12-14) discusses in detail the regional importance of elm throughout England in the past and present.

This is undoubtedly an interesting textbook which provides very useful, detailed information on the ecology and taxonomy of the elm. It is also an easily readable text in its entirety and is the most authoritatively produced of a number of recent works on the elm. It is sad that such a detailed appraisal of one of the now largely bygone characters of the English landscape should be published after its widespread and recent devastation. It is therefore unfortunate that only a minimal chapter (15) is given over to a discussion of its conservation when detailed historical appraisal might be put to contemporary use.

ROB SCAIFE

KLEIN, Richard G. and CRUZ-URIBE, Kathryn.  
*The analysis of animal bones from archaeological sites* (Prehistoric Archaeology and Ecology Series).  
Chicago, University of Chicago Press,  
1984. xii + 266 pp., illus. £18.50;  
paperback £8.25.

In their foreword the series' editors claim this book to be unique and 'a major advance in bioarchaeology' (p.x). The authors, in their preface, state that Part One of the book 'presents concepts and methods ... essential for obtaining valid and interesting information from archaeological assemblages' (p.xi) whilst Part Two provides listings of computer programs 'for calculating those faunal numbers that ... are most useful and important' (p.xi). Thus, there are two aspects to be addressed in a review of this book, relating to Parts One and Two respectively.

Part One comprises five chapters covering the topics of bone samples, identification (and related issues such as sex determination), quantification, sex and age profiles, and interpretation. There is not space in this review to consider the chapters in detail. They range from the detailed and useful (eg. taphonomy and stages of loss, pp.3-4), through the merely adequate (eg. parts of Chapter 2) to the inadequate (eg. quantification methods, pp.24-38).

It is heavily biased towards the authors' experience which appears to be limited to early prehistoric sites (particularly Pleistocene) in Africa and parts of Europe, and sites in America. There is no consideration whatever of the problems of dealing with material from complex economies such as from medieval Europe, and urban sites in particular. This exclusion has repercussions concerning their views on the efficacy of various methods of analysis. For example, they favour the minimum number of individuals method (p.37), which is now generally considered to be inadequate in many cases (see the excellent recent paper by Gautier (1984)). A further example is the somewhat naive application of ageing results (p.86) where not only are dental and epiphyseal fusion data compared *directly*, but they use the very problematic data of Silver (1969) (which refer to historic English stock) in an application for prehistoric African sheep. Such examples could easily be multiplied.

There are some interesting and thought-provoking ideas; for example, the population profile reconstructions (pp.85-92) and the discussion of some of the recent quantification methods employing ecological statistics (pp.32-37).

Part Two comprises a number of computer program listings in an advanced form of BASIC which is neither as universal nor portable as the authors imply (p.101). The descriptions of the programs and how to employ them are very full, but excessively repetitive and tedious. An introductory chapter describing the common features of the programs would have sufficed. One is constantly irritated by the patronising nature of this 'manual', and the section illustrating the recording of teeth is an extreme example (pp.144-146).

This reviewer regularly uses the system developed at the Ancient Monuments Laboratory, which for all its limitations is far

superior to the system presented in this book.

In general this is an American book which suffers from many aspects which British readers will find irritating and difficult - use of jargon and abbreviation, tortuous and verbose sentence structure, spelling, etc. There is a series of well presented illustrations, but four pages illustrating carpals and tarsals of obscure bovids and carnivores (nyala and brown hyaena) are a pointless luxury in a book which is not an anatomical atlas.

It may be that this book will find a useful place in the reading material of a student at an American university, but there is little to recommend it for the bone analyst or student working in Britain or Europe.

#### References

- Gautier, A. 1984. In C. Grigson and J. Clutton-Brock (eds.) *Animals and Archaeology: 4. Husbandry in Europe*. Oxford, British Archaeological Reports International Series 227.
- Silver, I. 1969. In D. Brothwell and E. Higgs (eds.) *Science and Archaeology*. London, Thames and Hudson.

BRUCE LEVITAN

pages of text discussing the relative merits of NISP, MNI and MAU as indicators of abundance? If you want a general text on quantitative approaches in zooarchaeology, this is not it.

The discussion is limited in various ways. First, most of the analysis is based upon animal remains from two rock shelter sites in North America. There is little here to help the zooarchaeologist working on material from complex settlement sites. Second, the quantification employed is very limited, being restricted to measures of abundance with simple statistical tests of these. Metrical approaches are not discussed nor are higher level statistics or computer applications to the analysis of zooarchaeological data. Thirdly, the range of animals discussed is limited to vertebrate remains, and here mostly to mammals. So don't be misled by the title.

My major criticism of the work is that it devotes so much slavish attention to the arithmetic of bone counting that the basic objectives of zooarchaeological analysis are neglected. Perhaps when we define the purpose of an analysis, the questions about quantification will be easier to formulate and to answer. It is, of course, very easy to say this in the context of a book review, so I will end on a responsible note by urging all practising and budding bone analysts to read this book.

K. D. THOMAS

GRAYSON, Donald K. *Quantitative zooarchaeology: topics in the analysis of archaeological faunas* (Studies in archaeological science). London, Academic Press, 1984. xx + 202 pp., illus. £24.00.

GOSS, Richard J. *Deer antlers: regeneration, function and evolution*. London, Academic Press, 1983. xvi + 316 pp., 153 figs. £45.00.

This is a book about counting. Just how do we measure abundance in assemblages of animal remains from archaeological sites? The author has published a number of valuable papers on this basic problem and it is useful to have all the arguments and approaches evaluated in one book. It is, however, a work for the dedicated specialist only. Who else would be prepared to plough through

This fascinating book on deer antlers is primarily intended for the biologist and zoologist. As such the material covered is of a specialist nature. The subjects which are discussed range from the evolutionary development of antlers to the processes by which they are cast and regenerated.



For those not familiar with the different species of deer the second chapter is an extremely useful guide to the diversity of these animals. Goss provides the reader with detailed information on each species which includes distinguishing features and geographic distribution. Chapter three discusses the development and biology of animal horns, a material quite different from antler. The distinction between horn and antler is significant as the former is best classified as 'dead' while the latter is living tissue with a blood supply.

The following four sections deal with the function of antlers, their morphology and regeneration. These are primarily concerned with explaining the development of antler in anatomical and bio-chemical terms. Among the topics covered in chapters 11-13 are the effects of geographic location, hormones and castration upon the growth and formation of antlers.

The author in his preface writes that research such as this may be regarded as too narrow and specific providing little of interest to those outside the field of zoology. If the reader can overcome this initial reservation he is certain to find a great deal of useful material in *Deer Antlers*.

C. A. BERGMAN

RICHARDS, J. D. and RYAN, N. S. *Data processing in archaeology* (Cambridge monographs in archaeology). Cambridge, Cambridge University Press, 1985. xii + 232 pp., illus. £13.50.

This is the first of a series of Cambridge Manuals in Archaeology, destined to be followed by volumes on excavation, survey, etc., and it deals with the use of computers for information retrieval and databases. It should be stressed that it is not about statistics, graphics or the results of using computers - it deals simply with the details of holding archaeological information on a computer and how to get it out again.

This is, of course, an important and growing subject, and any archaeologist dealing with anything other than very small sets of data would do well to familiarise himself/herself with the contents of the volume.

There are six sections: the first deals with abstract ideas about data in archaeology, distinguishing for instance between nominal level measurement (categorising Black as 1, Yellow as 2 and Blue as 3, where there is no meaningful sequence in the names) and interval level measurement (years AD or BC, where one year must precede or follow another). The second discusses the types of computer hardware available and applicable (including printers, plotters, etc.), while the third describes suitable software, with detailed discussions of four programming languages (BASIC, FORTRAN, COBOL and Pascal). The fourth part is about how to code or classify your data for the computer, while the fifth is about the different ways in which the computer can hold data in files (with or without an index to a particular field, for instance) and how you can exploit them; finally, there is a section about some of the major statistical, graphical and database packages available on mainframe and microcomputers (SPSS, GINO, dBase, Wordstar, etc.), not forgetting the inevitable word-processing. Described thus, it should be clear that Richards and Ryan have covered the main questions archaeologists ask about computers ('how do I prepare data? how do I get it in? what can it do?'), both in theory and in quite detailed practice - they describe actual sessions on an ICL VME system and a computer running UNIX, and although the reader is unlikely to follow them, he/she should find this 'nuts and bolts' approach reassuring (the 'no, it doesn't require a degree in maths' line).

It seems that the authors have not had particularly wide experience of different computers, nor have they strayed far beyond the inevitably limited confines of their N Staffs Polytechnic academic department - there is a heavy emphasis in the examples on ICL mainframe software and hardware, and the Sirius micro. It seems likely, on internal evidence, that the text was completed in 1983 and so the rather out-dated examples should be blamed more on the dilatoriness of CUP than the authors' ignorance - there is little point in a practical book of this kind if it is several years out of date when it comes out. Although the text goes to some trouble to print the first occurrence of 'jargon'

words in bold type, and list them in a glossary, there are no references in the glossary or index to 'expert systems', 'spreadsheets', 'icons' or 'mouse', nor would one gather from reading this book that the dominant micros in 1986 are the IBM PC and Apple Macintosh, nor that there is a 'fifth generation project'. The major criticism one has to make of this book is that it describes the academic mainframe computing world of 5 years ago. Maybe North Staffs Polytechnic still has a punched card machine, but that is no excuse for describing card punching, 'coding sheets' and all upper-case input for 6 1/2 pages before even mentioning terminals. Nor is it easy to forgive the long description of programming in COBOL, let alone perpetuating the myths about BASIC as an 'easy' language. On a specific point, one cannot pass over the statement that the current version of FORTRAN is FORTRAN IV - are the authors aware that ANSI is currently preparing FORTRAN8X as a successor to FORTRAN77, which they describe as a 'new version' (it was standardised in 1978)? It is also nonsense to imply that FORTRAN cannot deal with text effectively or easily. We can see why there is no discussion of logic programming or expert systems, given the date of composition, but it is still an unfortunate omission for the 1986 reader. But all this is beside the point - most workers now will use a database program on a micro or a mainframe, so all the discussion of programming, editors and ISAM files is largely irrelevant. These things are for professionals whom the archaeologist may wish to employ - for too long has archaeology been bedevilled by the archaeologist poaching misunderstood techniques from other disciplines and re-inventing metaphorical hexagonal wheels. Of course an archaeologist can design a Codasyl database schema if he is prepared to spend the time, but Richards and Ryan should have advised them to do it in conjunction with a trained systems analyst, and devoted more space to describing normalisation (not in the glossary) techniques. Should we not also have been informed about hardware tools to help the large database user? - as ICL mainframe users, the authors should have told us about CAFS (Content Addressable Filestore), which is used to great effect in at least two IDMS archaeological databases in Oxford to cut down search times to at least 1% of the conventional time.

It is sad to need to make so many criticisms of Richards and Ryan, because much of the book is very helpful in general advice

about archaeological computing, and the section on packages is quite fair (though what about spreadsheets?). One major point I would have wished to be stressed more is the usefulness of typesetting reports from text or data help in a computer with a photo-typesetter. Many people still use a word-processor for reports, and then send a paper copy to the publisher. There is a substantial interest in the publishing world in using the author's computer media directly, and even in electronic publishing of databases (the 'optical disc' OED could be equalled by the 'optical disc Devon SMR'). Leaving this aside, the aims and overall achievements of the book are laudable; it is nicely produced and not too expensive, and the writing is bearable, if turgid. One could wish that CUP had not published it slowly, and in a hardback 'reference' format, as it has lost credibility in the process, but that should not stop many people reading it with great benefit. But those who find the book difficult should be reassured that computing can be much easier than it seems here.

SEBASTIAN P. Q. RAHTZ

BINFORD, Lewis R. *In pursuit of the past: decoding the archaeological record.* London, Thames and Hudson, 1983. 256 pp., 147 pls. £12.50.

This book is based upon a series of taped lectures delivered by L. R. Binford during a visit to Europe in the winter of 1980-81, and it is probably the basis of the book that makes it different from Binford's other writing in two important ways: it retains the sense of enthusiasm for archaeological investigation which was conveyed by Binford's oral delivery, and it is readable. In the Editorial Note, John F. Cherry and Robin Torrence imply that they had more difficulty with the written additions to the book, which Binford drafted during fieldwork in South Africa, than they did with the lecture transcriptions: 'Our main job was to ensure consistency throughout and, ... to



simplify ... those passages made somewhat inaccessible by the famous Binford prose style (a problem rarely encountered in his spoken deliveries). This has been a far more time-consuming task than we imagined at the outset ...' (p.10). Though the editors say that their task was a pleasure, they deserve the highest praise for the results of what must have been an onerous and complex job. Binford's uncomplicated lecture style is reproduced intact and one is never aware where his peculiar written dialect may have been translated into clear English. The book has abundant ethno-archaeological illustrations which range from photographs of artefacts to maps of hunter-gatherer debris. The rather personal lecture mode is maintained through cartoons, interspersed with such items as a working plan of Combe Grenal on graph paper and a poorly focused but charming snapshot of François Bordes.

The purpose of the book is evangelical. Binford states in the Preface that '... my lectures should be seen as a kind of missionary work, pointing to some of the interesting problems of inferential method that arise in dealing with hunters and gatherers' (p.15). Binford perceived his audiences in northern Europe to be uninterested in the Palaeolithic and uninformed about it, and he set out both to interest and to inspire them.

The chapters of the book are set out in roughly chronological order according to archaeological evidence. The first chapter is devoted to a discussion of the nature of archaeological evidence, some of the most useful methods for making sense of it, and a few of the major questions about human cultural evolution that archaeology is capable of answering. The next six chapters discuss problems of the Palaeolithic alongside relevant ethnographic data, examples from Binford's and others' research. The last two chapters broach the origins of agriculture and complex societies. This more recent prehistory follows naturally from the preceding but may also have been a nod to Binford's northern European audiences. In any case, the last chapters provide the most dramatic backdrop for a juxtaposition between entrenched archaeological thinking and Binford's call for a 'scientifically built observational language' (p.232).

There are statements in this book which seem to run counter to Binford's own arguments, and there are some phrases that could be taken as dogmatic, but these characteris-

tics are present in Binford's other writing and seem to be an integral part of his message: if something is thought to be understood completely, then it is misunderstood. His writing often seems to stand in for the archaeological material, and this is surely one of the main factors in his influence as a teacher and theorist.

The book is completely successful in its purpose, to inspire and to enlighten. The fact that it is pleasant and easy to read means that at least some of Binford's good ideas are available to students and to the general public. The book also allows other archaeologists to be certain, perhaps for the first time, that they do not entirely understand the archaeological evidence. It must be what Binford had in mind.

EMILY H. MOSS

JORDAN, Paul. *The face of the past*. London, Batsford, 1984. 151 pp., 57 pls. £12.50.

Paul Jordan states that he 'does not set out to present a potted history of mankind'; he does just this for much of the book.

The first six chapters deal with the evolution of mankind, followed by a chapter on the first farmers, two chapters on Ancient Egypt, a chapter each on the Graeco-Roman world and Barbarian Europe and concludes with a chapter on the Turin Shroud.

The book draws chiefly upon the physical remains of the human face rather than representations in art, which are often more a matter of taste than reality. A book of this brevity which sets itself such a wide field of study will inevitably run into the problem of stating rather too emphatically many contentious points and it is here that the main weakness of the book lies.

To pick up on a few points of this criticism, in Chapter 7, where he discusses

the 'Invention of Farming' he sees the retreat of the last ice sheet from Europe as leaving man to a 'meaner life' where many would see it as an opportunity to exploit a far wider range of habitats. He also takes the view that 'the domestication of animals was added to the cultivation of plants', which glosses over the complex problem of recognising when wild animals or cereals have become truly domesticated.

There are fifty-seven photographs in the centre of the book. Nos 15 and 16 illustrate how our preconceptions may influence the reconstruction of past faces, contrasting the face of Pekin Man created by Maurice Wilson displaying an innate intelligence with the brutish face constructed by Mikhail Gerasimov.

His chapter on the Turin Shroud sets out the current controversy surrounding it and rightly concludes the submission of a small sample for scientific dating would do much at least to narrow the field for speculation.

There are two typesetting errors contained within the text, '1890s' on p.41 and 'tool-kit' on p.63.

*The face of the past* is essentially a 'popular' book and its very broad span in so few pages has left interesting points not followed up and has led to the over simplification of many problems.

W. D. COCROFT

HODDER, I. *Symbols in action: ethnoarchaeological studies of material culture* (New Studies in Archaeology). Cambridge, Cambridge University Press, 1982. x + 244 pp., 87 figs. £19.50.

*Symbols in action* offers the reader a critical and thought-provoking assessment of some currently dominant attitudes towards the relationship between material culture and social context. A new 'Contextual Archaeology' emerges as both the sufficiency of purely functional adaptive paradigms, and

the plausibility of material culture as a 'reflection' of behaviour are questioned. The ethnoarchaeological research upon which this book is based instead focuses upon material items as information-laden signs with multiple levels of meaning (*Symbols*) which do not passively reflect but actively operate (*in action*) on behaviour. After much insightful, clever and occasionally confusing discussion of research conducted in four different areas of sub-Saharan Africa, the book eventually unveils a new approach to archaeology which emphasises the historically sensitive study of how sets of material symbols are logically integrated into both ecological and social strategies.

Before we reach this point, however, the ethnoarchaeological studies first take us to the Baringo district of north central Kenya, an area characterised by social and environmental variation with clearly held tribal identities and material cultural boundaries. This situation could be considered as reflecting a lack of contact, differences in social customs, or unique economies; however, we are told that it is more relevant to consider the nature of interaction and the degree of intergroup competition. It is hypothesised that the accentuation of ethnic differences is advantageous in zones of resource competition where negative reciprocity becomes both possible and profitable. Through its role in signifying, solidifying and mobilising opposing sides, material culture is partially responsible for the formation of negative reciprocity. Conversely, where resource competition is mitigated, material cultural boundaries become blurred as there would be no advantage in signalling ethnic differences. It is appropriate at this point to raise a methodological question. Were material culture breaks, perceived ethnic boundaries, and zones of competition independently established? Here, and throughout the book, we are led to believe that 'clothes make the man', rather than first discovering ethnic discontinuities and then examining whether or not they are associated with material cultural boundaries as well. However, this leads one to the thornier problem, or how ethnic identity is defined in a social sense. We are not told. The problem surfaces again when considering areas of lessened competition where material patterning is blurred across ethnic boundaries. Clearly these are observed despite material cultural blurring. How, then, are ethnic boundaries defined and, therefore, discovered? Further-



more, are there rigorous and independent criteria for establishing areas with differing levels of competition? At times it appears as if the study may fall into the trap of circular reasoning.

Resolution to this methodological problem is not found in Chapter 3, which examines how material items can reinforce cultural differences and enhance both competition and negative reciprocity. Here it is clearly suggested that material culture lies behind the formation of group identity, as in the case of Njemps pots (p.41). However, later we are told that a sharp southward fall-off of Njemps stools is associated with a tribal boundary (p.54). Exactly how is this boundary defined? This is of importance, for hearth positioning is next studied, and we are told that an ambiguous patterning of hearth placement in the hut occurs in areas of lessened competition. Here, ethnic boundaries are defined on the basis of material cultural patterning, and seem to become fixed into identifiable entities. Thereafter, any ambiguous patterning within these boundaries is explained as a factor of independent variables (eg. competition). A clear *a priori* explication of methodology might overcome this logical dilemma.

We next see how material culture can disrupt social boundaries. The treatment of spears and calabashes cross-cuts ethnic boundaries, therefore providing an example of how it is necessary to understand both the symbolic meaning of artefacts and how this is manipulated as part of a social strategy. Spears are the important symbol of the young warrior *moran* through which its members express both their readiness for manhood as well as their antagonism toward the older men who monopolise women and cattle. Significantly, spear styles are similar over wide areas, yet this neither reflects industrial organisation nor group interaction. Instead, homogeneity of style is seen as a symbolic expression of all young men regardless of tribal identity. However, apart from a brief mention of the historic copying of Maasi spears, this alone does not convincingly explain strong homogeneity between potentially antagonistic *moran* who otherwise can maintain strong material boundaries for their own benefit and protection. Similarly, we are told that calabash decoration also has nothing to do with tribal boundaries, serving instead as a local female strategy against the dominance of older men. Unlike other aspects of material culture, men pay little

attention to calabashes which can therefore serve as a medium for independent, albeit silent discourse. In light of the material items which are not patterned according to tribal identity, it is again relevant to question the methodology underlying the establishment of ethnic boundaries. Unfortunately, this is not clearly defined earlier on.

A subsequent chapter convincingly discusses material cultural relationships to individual group strategies within their social and economic contexts. Strategies within tribal boundaries are once again emphasised by examining: material cultural boundaries and the strategies of older men in a polygamous society with strong age sets preventing early marriage; the decreasing importance of age symbolism among increasingly independent child-bearing women whose sons eventually become *moran*; and sexual dichotomies played out in the arena of a patrilineal, polygamous, and pastoral society.

We next travel to the Leroghi Plateau of Kenya where ethnoarchaeological research amongst hunter-gatherers and pastoralists warns us of the difficulties inherent in the construction of simple correlations between material cultural patterning, resource distribution, and competition. In terms of utilitarian items, the hunter-gatherer Dorobo share a material cultural identity with Maasi groups. Historically Maasi, 'Dorobi' refers to a chosen lifestyle, yet at least verbally they are considered to be distinct. Inter-group relations also historically fluctuate between states of symbiosis and competition. Material cultural patterning is the result of a complex set of interactions.

Widespread material cultural blurring in western Zambia is next related to economic symbiosis between groups which were historically amalgamated into the expansionist Lozi state. In contrast, recent Mbunda immigrants retain a potentially 'visible' (to archaeologists) identity, which is underlain by competition over access to cattle, grazing land, and iron. The historic mitigation of distinct identities during the height of Lozi expansion, however, implicates state ideology as an additional factor in boundary blurring. Other cautionary notes in this chapter suggest that: stylistic patterning neither reflects the nature of production nor interaction in a

simple way; status and increased material wealth are not always related; and the Longacre-Deetz-Hill hypothesis regarding matrilocality and design localisation may be inapplicable in Lozi context.

A final ethnoarchaeological study in the Nuba mountains of Sudan continues to assess the 'reflective' and 'ecologically adaptive' interpretative viewpoints of material patterning by examining underlying symbolic principles. A most interesting point in this chapter concerns intra-site patterning of refuse in relation to differing concepts of purity and cleanliness. Zooarchaeologists should take note. Archaeologically visible aspects of symboling in association with burial assemblages are also discussed. The location of graves may be linked to notions of access to land rights. The state and quantity of grave goods may indicate competitive differences in inheritance systems. The incorporation of specific items, and the form of the grave itself may be associated with concepts of inheritance, continuity and fertility.

In the final chapter we are introduced to a less behaviourally or ecologically oriented archaeology, for the time has come to integrate a discipline fragmented by the specialised study of arbitrary subsystems. 'Wholeness' is stressed as emphasis is given to 'the particular way that general symbolic and structural principles are assembled into coherent sets and integrated into social and ecological strategies' (p.217). Now for the hard part. The author admits that he would be performing 'sleight of hand' by simply musing about how a known cultural entity might somehow look archaeologically. In the closing ten pages of the book, we are treated to a rather unconvincing first application of Contextual Archaeology to previously published data from late Neolithic Orkney. What results seems like a 'thickly described just-so story' which relies in large part on the previously dismissed social interpretation of mortuary material. Nevertheless, the final point to be made in the book, that 'the ethnoarchaeological studies presented in this book have resulted in the asking of many more questions than have been answered' (p.229), should be heeded by all archaeologists whose aim it is to provide some muscle to their incomplete skeleton of bones, stones or pots. As an interesting cautionary note on the way in which we relate

material culture to social context, this book excels.

PETER W. STAHL

PADER, Ellen-Jane. *Symbolism, social relations and the interpretation of mortuary remains* (BAR Int. Ser. 130). Oxford, British Archaeological Reports, 1982. xii + 220 pp., 60 figs., 41 tables. £9.00.

This book is in two main parts - the first theory, the second analysis. In the latter Pader undertakes a detailed computer analysis of a number of excavated Anglo-Saxon cemeteries, particularly those at Holywell Row in Mildenhall and Westgarth Gardens in Bury St Edmunds. An attempt is made to determine the structure of space-use in the graves in relation to age, sex, body position, artefacts, etc.

However, the primary aim of the study is not the reconstruction of Anglo-Saxon society from its mortuary practices, but the explication of a theory of symbolism and ritual based on post-structuralist and Marxist perspectives, and of a methodology whereby the complexities that such a theory implies can be drawn out in the archaeological analysis.

For the theory Pader draws mainly on Giddens' theory of structuration, focusing not on the arbitrary symbol as end-product, but on the contexts and processes of a symbol's generation and signification, reproduction and transformation, so overcoming some of the dichotomies inherent in Saussure's semiological approach, eg. structure/action, form/content, symbol/meaning, synchrony/diachrony, etc. This leads to a model of ritual as a process of legitimising social relations by their ideological representation as timeless, inevitable and natural. Ethnographic examples of bodily adornment, and of mortuary practices (using Bloch's study of the Merina of Madagascar) illustrate these processes in material



culture terms. From this theoretical position the author provides a useful and welcome challenge to recent orthodoxies in the archaeological interpretation of mortuary practices, particularly those functionalist analyses stemming from Binford, Saxe, etc.

There follows a short chapter on the problems of written sources in the interpretation of Anglo-Saxon society. Pader explains the reasons for their unreliability. However, some of the theoretical points raised in this section, such as those relating to the processes whereby explicit discourses and implicit meanings are reproduced and/or transformed over time, would appear to be very relevant to the general problems of ritual and symbolism. For instance, within these processes, what is the relationship between the formal ritual discourse, ie. the explicit interpretation (if any) of what the special ritual activity means, and the non-discursive practical knowledge of how the ritual is done? These two factors combine in the process of structuration, but can also be, to some extent, contradictory. Some of the implications of the discussion in this chapter, therefore, could have been more fully developed in both the theory and the analysis.

In one sense, the chapter - 'Methodology: connecting theory and practice' - should be the focus of this book, for without appropriate analytical methods good theory is largely wasted, and any results that the analysis produces have limited value.

It is a pity, therefore, that this section is so short, and that it is not always clear what the various statistical tests are measuring in terms of the concepts introduced by the theory. The tests do reveal a variety of correlations within the material, supporting the proposition that the symbolic values of space-use are both multi-dimensional and dependent on context. But words such as 'meaning' sit uneasily within the body of the analysis, having been neither well defined, nor adequately drawn through the methodological link between the theory and the analysis. Also, despite a partially measurable temporal sequence within each cemetery, the structural relationships apparent in the use of space are predominantly synchronic in the way they are presented.

Nevertheless, in many respects this is an interesting and rewarding study which, without doubt, fulfills its secondary aim which is to challenge archaeologists' pre-

conceptions about human behaviour, particularly mortuary practices.

ANDREW POWELL

MILLER, David and TILLEY, Christopher (eds). *Ideology, power and prehistory*. Cambridge, Cambridge University Press, 1984. vii + 157 pp., illus. £25.00.

This book shares a concern with earlier CUP volumes in crediting past societies with an active intelligence which created remains which archaeologists discover. However, it develops a single theme - that of ideology. Miller and Tilley's introduction presents ideology as the way in which social groups represent the world from their own viewpoint and attempt to impose that representation on others.

The book contains three ethnographic/historical and four archaeological studies. The weakest is Welbourn on the pottery of the Endo: her conclusions suffer from lack of time depth and a concern with only one artefact type. Miller on architectural modernism is interesting; especially on the relationship between bureaucratic control, scientific architecture, and producing 'machines for living', which planners themselves carefully avoided. The best ethnographic study is by Leone on C18 Virginia and the 'Georgian order' - a cohesive hierarchical world view affecting architecture, interior design, manners, the use of space, etc. This was created by a planter-gentry which, threatened by economic and social collapse, sought to control reality by principles of natural and historical order. Leone shows how in gardens control over the natural world was transformed into a rigid order. This is a thoughtful and thought-provoking paper; its only weakness is the glossing over of the apparently fundamentally contradictory presence of a wilderness area in this rigidly controlled garden.

Of the archaeological contributions, Hodder's on the Western European Neolithic

is the slightest. He discusses the long established similarity between continental long houses and the long barrows and chambered tombs of the Atlantic façade. He relates this to a changing emphasis from labour to land. This is a possible theory, but he fails to specify local circumstances of change. Braithwaite deals with the change from communal ritual to individual burials in Late Neolithic and Early Bronze Age Wessex; despite some chronological confusion, this is a well argued paper. Tilley deals with Swedish Middle Neolithic chambered tombs, and his treatment of their remarkable pottery deposits is an important development. However, like other studies in this volume, his fails to explain adequately the social changes his analysis reveals. In the best paper in the volume Parker Pearson convincingly analyses a boom-slump-boom progression in Iron Age Denmark from the evidence of settlements, burials, and votive deposits. Although the analysis is weak at the beginning and end of his sequence, he does consider the mass of evidence in a coherent framework.

Despite the failings of individual papers, this is a theoretical contribution worth considering, above all because the approach espoused here does offer the prospect of making some sense of our intractable data.

I. J. THORPE

CLEERE, Henry (ed.). *Approaches to the archaeological heritage: a comparative study of world cultural resource management systems* (New Directions in Archaeology). Cambridge, Cambridge University Press, 1984. x + 138 pp., 30 figs. £22.00.

This book takes as its theme an important but little discussed field, namely 'cultural resource management'. It explores this field with an outline of the theory by Lipe, followed by papers on the approaches taken in twelve countries ranging over four

continents; a notable omission is the policy adopted by at least one near eastern country; the book concludes with a chapter on the problems and perspectives by Cleere.

All the contributions follow the general format of giving a brief historical outline to ancient monuments legislation within their respective countries, the present framework of legislation and the archaeological organisations working in their countries.

As one would expect there is no consistent policy across the countries surveyed and many of the policies adopted are shown to be inadequate when faced with current pressures on land for development.

Superficially Japan may appear to be in an enviable position with £63m spent on rescue archaeology in 1980 but when dealing with an ever diminishing resource the need is not for a once only payment from a developer to have a site excavated and then destroyed but for long term preservation, a far more difficult political decision. £63m also makes for a huge problem in the publication and dissemination of information!

Sites in the Third World are threatened by indifferent governments who often only see the spectacular sites which are able to affirm a national identity or attract tourism, to the detriment of the 'lesser' sites.

Denmark is the one country that stands out of this study in pursuing an almost model system. Kristiansen makes clear that this has only been achieved through a long tradition of public awareness of their past and not just through legislation. It is a view being increasingly echoed in Britain that only through a major shift in public opinion can more effective legislation be enacted to fill the gaps in the 1979 Act and the present rate of destruction arrested or at least recorded adequately.

Cleere deserves to be read by all those involved with 'cultural resource management' and from the mistakes of others may result the necessary legislation and organisation needed to protect the archaeological heritage from the worldwide demand for land.

W. D. COCROFT



BARKER, Philip. *Techniques of archaeological excavation*. New edition. London, Batsford, 1982. 285 pp., 86 pls. £7.95.

*Techniques of archaeological excavation* (1977) should be familiar to all students of archaeology, as the clearest statement on the art of excavation as it is practised in Britain today from a (if not the) leading exponent of open area excavation.

Barker states that he 'does not pretend to be the compleat excavator'. What he does provide is the carefully thought out passage through the preliminaries to excavation, to the actual excavation and the final publication, the discussion of which will not be found elsewhere in a single volume.

The additions to the 1982 edition are of a minor nature, with the improvement of a number of illustrations, the use of more recent pro-forma recording cards where necessary and an up-dating of the bibliography.

Chapter 4, with the new title of 'Problems and Strategies', concerns itself with the discussion of the vexed problem of deciding just which threatened sites should be dug. Within this chapter is shown his scepticism of the value of many sampling procedures proposed in recent years. Many will have their own favourite 'sod's law' story and its applicability to archaeology.

In Chapter 13, on publication, some space is devoted to the as yet unresolved question of the desirability of using microfiche for the publication of at least part of archaeological reports.

A two page appendix has been added on the use of metal detectors. One would hope that anyone who has read this far would fully appreciate the threat posed by indiscriminate digging on archaeological sites.

It is unfortunate with a book that will remain a standard text book for many years to come that a few errors have crept into the text. On pp.222 and 223 there are six spelling mistakes, on p.259 in reference to the bowsided building at Wroxeter not only are the figure references incorrect but the photographs show the reconstructed Pimperne House at Butzer not the Wroxeter building referred to in the text.

Despite these minor textual errors, Barker still remains the best overall discussion of present day excavation techniques in Britain and remains essential reading for all archaeologists.

W. D. COCROFT

PROUDFOOT, Christopher and WALKER, Philip. *Woodworking tools* (Christie's Collectors Guides). Oxford, Phaidon; Christie's, 1984. 160 pp., 152 illus. £15.00.

*Woodworking tools* is an unusual book to be reviewed for these pages as it is not strictly an archaeological work, but one of a series of books produced by the auctioneers Christie's for the benefit of collectors.

This has naturally reflected itself in the contents and layout of the book. Much of the book is devoted to the history and evolution of the plane, the plane being eminently suitable for the collector due to the large variety of types that have been produced. The planes illustrated here are chiefly of the eighteenth century or later in date, as relatively few early examples survive to be available for collectors.

The plane has a very respectable antecedence possibly dating back to the third millennium BC in Egypt and is certainly well known from the Roman world. The Roman examples which have survived have been chiefly iron shod, while it is clear from the chapter on wood planes that a large variety of planes were made out of wood, with only the cutting iron being of metal, a factor that has no doubt influenced their poor survival in the archaeological record, coupled with the fact that a plane's cutting iron could easily go unrecognised. Two other noteworthy points were made in this chapter, firstly that a carpenter would probably have a number of different planes and secondly that prior to the eighteenth century wooden planes would often have been

made by the user.

Following on from this chapter is an instructive chapter on decorated and dated tools. As pointed out in the text, the criterion of decoration has been used to distinguish tools from weapons, but even a cursory glance at this chapter will clearly show that craftsmen have liked to own very highly decorated tools.

Another area much loved by the tool collector is that of braces and other hole boring tools. Like planes they have a well documented history and exhibit a wide variety of forms. A full chapter has been devoted to them.

The book concludes with a brief survey of other woodworking tools; this includes chisels, hammers, adzes and axes. Again, the examples given chiefly relate to the eighteenth century or later.

The book is well illustrated throughout with colour and black and white photographs of representative tool types along with illustrations from manufacturers' catalogues, and contains a useful glossary of terms related to woodworking tools.

*Woodworking tools* is not an archaeology book but contains much of interest to people working in the post-medieval period, either as a source for parallels or for illuminating the range of tools available to the carpenter of this period.

W. D. COCROFT

WOODHEAD, Peter. *Key guide to information sources in archaeology*. London, Mansell, 1985. xiv + 219 pp. £21.50.

A daunting title conceals a book that is not only useful but relatively easy to use, and engagingly modest in its claims. It sets out to provide a guide to 'the documentary reference aids and key organisational sources of information in archaeology worldwide', but

the author freely admits that archaeological literature is often poorly referenced and that the books that he suggests are liable to be superseded. What is particularly valuable is the clear way in which he sets out the type of information sources which do exist.

The arrangement of the book is to some extent dictated by the plan laid down by the publishers for the series of Key Guides to Information Sources which they intend to publish, so the book is divided into three parts, of which Part III is the least useful. This is a list of archaeological organisations of various kinds: a short list of international and multi-regional organisations, followed by an allocation of one organisation to each country which appears in the *Statesmen's Yearbook*. A country may be represented by a governmental body, a private society, a museum, a University or an Institute. As each country gets only one entry the choice must be arbitrary, and may be positively misleading. The introduction to the whole section refers the reader back to Chapter 3 of Part I, where a guide is given to reference works which provide full information in this field, such as the *World of Learning*, and it is to these that the enquirer should turn.

Parts I and II repay study, and need to be used in conjunction with each other. Part I, which is called 'Overview of archaeology and its literature', describes and classifies the kinds of information which are available and Part II gives examples of publications, classified by type and by world area. Part I is more wide-ranging than Part II as it includes sources of information other than books; when it refers to books which are included in Part II their entry numbers are given in brackets.

Part I is worth reading even by those allergic to information sources. It discusses the relationship of archaeology with other subjects, and gives a splendid chart of all the overlapping interests of students of archaeology. It describes the different ways in which to obtain information, from reading to osmosis, and the horrors of the archaeology classification in the Dewey Decimal System. Then it really gets down to sources. In the chapters 'Keeping up to date with Current Publications, Developments and Events' and 'Finding out about the Literature of Archaeology' it describes what is available in the form of Indexes, Abstracts,



Online Services and Bibliographies, and clearly defines the scope and purpose of these different types of service. There is a particularly useful list of those journals which include bibliographical listings and good book reviews ... although it fails to mention the *Bulletin* of the Institute of Archaeology! Because archaeology is still so poorly provided with bibliographical tools the author includes a number of general bibliographies and guides to reference books which include only a small proportion of archaeological material ... but archaeologists often have to venture outside their own field. Finally the author categorises the forms in which archaeology is published. He discusses lists of periodicals, and sources of periodical abbreviations, indexes in which theses may be traced, 'grey' literature, audiovisual aids, maps, gazetteers and sources for air photographs. He divides source books into the following categories: 'Surveys', 'Textbooks, Handbooks and Manuals', 'Dictionaries and Encyclopaedias', 'Linguistic Dictionaries' and 'Archaeological Atlases'. He also mentions some of the major English series of monographs. This division is important, for it is what is used in Part II, 'Bibliographical Listing of Sources of Information' and it provides a strait jacket into which lists of books have to be squeezed. This categorisation is not always helpful, nor is it used consistently.

All the sections in Part II, 'General Archaeology Worldwide and Multiregional', 'Archaeological Science' and then by continent with regional groupings within each continent, begin with what is available in the form of general bibliographical guides, abstracts, indexes and current awareness material, and this is invaluable. Important periodicals and series are also selected for inclusion, but the format is inconsistent. They are listed separately for 'General Archaeology' (but the *Archives de l'Institut de Paléontologie Humaine*, which is a monograph series, is classed as a periodical); they are listed as Periodicals and Series together for the British Isles, but in the other regions all are classed together as 'Periodicals'. It is certainly often quite difficult to distinguish between a periodical and a monograph series, as the same title may change from being of one type to another in mid-career, but it would be helpful to explain this. An alternative would be to group them together always as 'serial publications'.

The real problem arises when an attempt

is made to provide a list of 'Surveys' in each section, as for many areas these simply do not exist. France may have its *La Pré-histoire Française* and Yugoslavia its *Praistorija Jugoslavenskih Zemalja*, but the list for Britain can only be called lightweight, and one must wonder why the only Survey for the whole of Scandinavia is a book written in Finnish in 1979. It is fair to say that when defining Surveys in Part I the author says that 'the pace of modern archaeology means that such syntheses soon need updating', and refers the enquirer to the source books which are themselves automatically updated, the running bibliographies, indexes, etc. It is in pin-pointing such works that the great value of this book lies, and all serious students must be grateful to the author for his patient and thorough work in collecting them together.

HEATHER BELL

CRANE, E. *The archaeology of beekeeping*. London, Duckworth, 1983. 360 pp., figs. (line drawings and plates), tables. £25.00.

CRANE, Eva and GRAHAM, A. J. *Bee hives of the ancient world*. (Reprinted from *Bee world* 66 [1985]: 25-41 and 148-170.) (IBRA reprint M117.) Gerrards Cross, International Bee Research Association, 1985. 44 pp., figs. (line drawings and plates), tables. Price not stated.

Dr Crane's excellent book deals with man's exploitation of bees for honey and beeswax over the last 10,000 years. It is, as the title suggests, a book on the *archaeology* of bee exploitation, dealing with the material evidence for such activities in the past and with the changes and evolution of the material culture associated with the exploitation (domestication?) of bees. Documentary evidence from various parts of the world (ancient Egypt, Greece, Rome and the Mayan codices) is used either where material evidence is so-far absent or where it backs up, or illuminates, interpretations based on

the material evidence. Ethnographic accounts of bee exploitation are also given for most parts of the world.

I have been deliberately careful so far in this review to talk about 'bee exploitation' rather than 'beekeeping', although most of the book is about the latter. There are, however, two important chapters in the book which are not about beekeeping: one deals with honey-hunting in various parts of the world and the other with forest 'beekeeping' in the cool and cold temperate forests of central and northern Europe. Honey-hunting, the harvesting of honey by locating the nests of wild bees, is certainly the oldest form of exploitation, dating back to at least 10,000 years ago. Evidence, in the form of art on the walls of caves and on other rock surfaces, comes from the Mesolithic of Spain and from numerous, mostly undated, sites in Africa, Asia and Australia. These rock paintings, lively in themselves, are given added life by the numerous ethnographic accounts of honey-hunting which accompany them. Altogether, this chapter makes fascinating reading. The chapter on forest 'beekeeping' is also very interesting as it deals with a transition from destructive to non-destructive harvesting of wild hives, involving quite sophisticated techniques which approach those of true beekeeping.

The earliest attested evidence for beekeeping, in man-made hives of clay, comes from Egypt, around 2400 BC. The Egyptian evidence appears to be restricted to pictorial representations in tombs and documentary accounts. Pottery hives have survived from Classical Greece; chemical analysis has shown the presence of traces of beeswax in one such vessel. No attested hives appear to survive from Roman sites but Roman authors describe nine types of hive, six of which were made from wood, basketry or other organic materials which would not be expected to survive in the archaeological record. Careful searching by Dr Crane has shown that eight of these nine types of hive are to be found in use today in various parts of the Old World. Again, we find a valuable combination of archaeological and ethnographic evidence, with the latter helping to illuminate the former. The supposed wicker skep (illustrated in Fig. 106), from the Feddersen Wierde bog in Lower Saxony and dated to AD 0-200, is more convincing when juxtaposed with more recent examples. The chapters on beekeeping cover the whole range of types from horizontal hives to bee skeps (baskets)

and vertical hives, including the development of modern movable frame hives. Other structures associated with beekeeping, such as bee boles, shelters and houses to protect skeps from the weather, are also considered.

There is a chapter on bees in art and every day life which covers the representation of bees and hives in art, the exploitation of honey for food and drink and the use of beeswax for a range of purposes.

I detected only two errors sufficiently glaring to be mentioned in this review, both, regrettably, of a biological nature. If the skep shown in Fig. 127 is indeed made of sedge, as the caption claims, then it cannot have been made from the stems of either of the two plant taxa named (which are grasses). The 'camel load of horizontal hives' shown in Fig. 39 is clearly a 'donkey load'.

The breadth of coverage in this book is impressive in terms of chronology, geography and the range of exploitation techniques considered. The book is profusely illustrated with drawings and black and white photographs. It is well written and well produced with a minimum of typographic errors. Dr Crane is a world authority on bees and is Director of the International Bee Research Association; she has produced an excellent and scholarly work on the archaeology of beekeeping.

The booklet by Crane and Graham updates Dr Crane's book to some extent, but also examines the range of sources of evidence for hives in the ancient world. The work originally appeared as two articles in the journal *Bee World* (volume 66, pp.25-41 and 148-170, for 1985). The first article deals with pictorial representations, contemporary records and literature; the second considers the archaeological evidence from a refreshingly critical viewpoint. This booklet is a valuable and scholarly addition to the literature.

Readers interested in the archaeological aspects of the exploitation of bees should also be aware of an interesting short paper by Susan Limbrey which is not cited in either of the two works reviewed here:

Limbrey, S. 1982. The honeybee and woodland resources. In M. Bell and S. Limbrey(eds.) *Archaeological Aspects of*



*of Woodland Ecology.* Oxford, British  
Archaeological Reports International  
Series 146. 279-286.

K. D. THOMAS

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# BOOKS RECEIVED

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